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A COMPARISON OF CONTRACTS INVOLVING THE PRIVATIZATION OF NEWARK AFB AND THE NAVAL AIR WARFARE CENTER-INDIANAPOLIS

THESIS

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THESIS

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Jim Valley

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Abstract

This thesis studies the contract types and incentives involved in the privatization of Newark AFB and the Naval Air Warfare Center-Indianapolis. Newark AFB was slated to close by the Base Realignment and Closure Commission (BRAC) in 1993. The Air Force decided to utilize an Indefinite Delivery Indefinite Quantity (IDIQ) contract, and utilize an award fee to incentivize the contractor. In 1995, the BRAC commission decided to close the Naval Air Warfare Center-Indianapolis. The Navy also decided to utilize an IDIQ contract and has mostly utilized the Fixed Price Level-of-Effort contract to obtain its requirements.

Through interviews and a study of contract types, the contracts are analyzed to determine if the contract types are appropriate for what the Air Force and Navy are trying to accomplish. Through this effort possible areas of improvement are found that may help in future privatization efforts, to include the Kelly AFB and McClellan AFB depots.

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I. Introduction

General Issue

With the demise of the Soviet Union, the political forces in Washington DC waited patiently for the peace dividend to finally arrive. The results included the drastic cut of the U.S. fighting force and funds for modernization. Without a real advisary in the horizon the U.S. military has become secondary to the needs of reducing the deficit.

Due to this reduction in military expenditures (in real terms), the military must find alternative funding for the procurement of new weapons. According to the Defense Science Board Task Force on Outsourcing and Privatization, the DOD must shift its spending from support programs to procurement programs (Office of the Secretary of Defense for Acquisition and Technology, 26 August 1996: 1A). How can this be done? One way is by utilizing outsourcing and privatization. The task force believes that the military can save $7 to $12 billion annually by utilizing this strategy, and anything that does not "directly impact war

fighting capability" should be considered for outsourcing and privatization (Office of the Secretary of Defense..., 26 Aug 1996: 6A). Their study concluded that each program the DOD outsources will reduce the costs of that specific program by 30% to 40%. Some of the functions the public sector has outsourced includes "airport operations/maintenance, information technology, facilities maintenance/management, fleet maintenance/management, parking ticket writing, road maintenance, solid waste collection, and wastewater treatment" (Office of the Secretary of Defense for Acquisition and Technology, 26 August 1996: 26). (For a list of outsourced areas see Appendix A). According to The Outsourcing Institute, American businesses outsourced $100 billion worth in 1996 alone, and outsourcing is projected to reach $360 billion a year by the year 2000 (Ducey, 1997).

While the military's reason for outsourcing is to save money, the civilian sector looks to other things.

> The Top Five Tactical Reasons for Outsourcing:
> 1. Reduce or control operating costs.
> 2. Make capital funds available.
> 3. Cash infusion [through transfer of assets to contractor].
> 4. Resources not available internally.
> 5. Function difficult to manage or out of control. (The Outsourcing Institute, 16 October 1995: 5)

It is important for the military to look at more than just the reduction in costs for the reason to utilize outsourcing. The military can utilize the current technology, expertise, and economies of scale, that allow companies to do the

job faster, and with higher quality. In other words, even if the cost is equal to what the military is spending now, it can still be beneficial.

In this search for additional funds for modernization, the DOD has just started to utilize privatization. While outsourcing is the transfer of the workload to the private sector (by use of a contract), privatization is another form of outsourcing which involves the transfer of government assets to the private sector, after which the government contracts out work to this new entity (Office of the Secretary of Defense for Acquisition and Technology, August 1996: 7).

After the 1993 BRAC (Base Realignment and Closure Commission) slated Newark AFB for closure, the Air Force decided to use this base as a test in privatization. Newark AFB is mainly a repair depot for aircraft and missile inertial navigation systems. After the 1995 BRAC decided to close down the Naval Air Warfare Center (NAWC) in Indianapolis, the Navy decided privatization would be utilized rather than move the work to other production facilities. Now called the Hughes Air Warfare Center (HAWC), HAWC designs and produces avionics and electronic equipment (Wheeler, 1996:5). One of the reasons for these decisions were that private companies should be able to perform the same mission at a reduced cost.

Unfortunately there is some disagreement on whether privatization will actually save money. According to the GAO there is concern over the DOD's cost and savings estimates, and whether or not the DOD competes their depot level work adequately enough (GAO, March 1996: 2 ,3). It will be a few years

before it can be adequately ascertained whether or not the DOD will save any money in this effort. Despite the unknown there is considerable evidence that privatization will save money (even though there is no guarantee in any one privatization effort).

In 1984 Ecodata, Inc. performed a study to see how much savings occurred in outsourcing public sector services. They found savings from 37% (street tree maintenance) to 96% (asphalt overlay construction) (U.S. Department of Housing..., June 1994: 2). In the private sector the average savings is 9% (The Outsourcing Institute, 21 April 1997: 1). This savings is drastically lower than what the 1984 study showed, but the public sector may have been less lean in the early 1980's and with private sector companies reducing fat and downsizing they may not have as much room for savings here in the mid 1990s. With these facts in mind the military services are forecasting a 20-30% savings projection from outsourcing/privatization. The accuracy of this forecast is important because the services are budgeting the savings to the modernization program (GAO, March 1997: 7,8).

One way the military is involved in the privatization effort is by awarding a contract with the new private entity. It is this first contract that is vital to the success of privatization. If too much risk is given to the contractor the contractor may not succeed, while too little risk given to the contractor may lead to the government to not realize the savings it is counting on. This research delves

into two contracts with one of the first privatization efforts at the federal government level.

The first contract involves the privatization of Newark AFB. This contract, with Boeing (formally Rockwell), was the first privatization of one of the Air Force's depot facilities. Boeing provides, the Air Force and Navy, repair and maintenance of aircraft inertial guidance systems, and other components.

The Newark AFB community officially found out about the closure of Newark AFB on 1 July 1993 from the BRAC Commissions announcement. This date marked the start of an aggressive effort by Wally Horton (City consultant), and state and community leaders, to try to convince the Air Force and BRAC to privatize Newark AFB. They felt closure would have too severe of an impact on such a small community.

The second contract is with the Hughes Air Warfare Center (HAWC) (formerly Naval Air Warfare Center (NAWC)), which is now operated by Hughes. HAWC manufactures just about anything, but concentrates on avionics and electronics of aircraft, ships, and satellites.

Even before the 1995 BRAC Commission decided to close NAWC, the City of Indianapolis was planning on how to privatize the manufacturing facility. The city's experience in privatizing city services helped to convince the Navy that privatization would work. It was the experience and perseverance of the City of Indianapolis that allowed, so far, a smooth transition into privatization.

The case study's purpose was to see what contract vehicles were utilized at Newark AFB and NAWC and how they are working, and where they have been successful and unsuccessful. The contracts were the focus on the research because they are the basis for the privatization effort. It is through future contracts that the privatization effort may be improved. The questions address the problem we are trying to answer.

Specific Problem

The specific question this research is to address is: What types of contracts are being utilized at Indianapolis and Newark, and are they working?

Justification and Objectives

Research on privatization at Newark AFB has been done on the history of it (Pidgeon, September 1996) and on how it affected the workers (Luttschwager, September 1996). A case study concerning NAWC was also completed on the process the City of Indianapolis and Navy went through to privatize (Wheeler: 1996). While this research is invaluable to document the privatization process and the effect on the cities and workers involved (in order to improve on the privatization process), it is necessary to find out how effective the contract types are in order to improve future contracts. The effectiveness of the contracts will be determined by interviews with representatives from the government and

contractor side. The results from these two case studies can help ongoing and future development of contracts in privatized areas. An additional positive side affect may be to help with development of contracts as a whole.

The objective of this research was to identify where the contracts have been successful, or fallen below expectations, and why.

Investigative Questions

To accomplish the objective, data were collected through the use of multiple sources of evidence through interviews and documentation from the former Newark AFB depot, and NAWC (Yin, 1988: 93). This data were then categorized noting patterns and themes (Miles and Huberman, 1984: 216). This was done in order to answer the following questions:

Investigative question One: How is it determined to use a certain type of contract? What factors are utilized to make this decision? How do you incentivize the contractor through the use of contract types in the IDIQ?

Investigative question two: As a Procuring Contracting Officer (PCO), what controls do you use to ensure the right type of contract is used? How do you control the process?

Investigative question three: What types of problems are you having with the contract? What could have been done better with the contract?

Investigative question four: As a ordering officer, how much contact do you have with the PCOs and Administrative Contracting Officer (ACO)?

Investigative question five: Ordering officer question: In your duties as an ordering officer, have problems occurred because of the way the contract was written, or due to the types of contracts authorized?

Investigative question six: As an ACO, how much contact do you have with the PCO and ordering officers?

Investigative question seven: As an ACO, what types of problems are occurring from an administrative standpoint of the contract? Are these problems helping or hurting the ability to incentivize the contractor?

Investigative question eight: As an award fee representative, how do you feel the award fee is incentivizing the contractor? Has there been any improvement from award fee periods?

Investigative question nine: For contractors: Does the contract incentivize you to perform better, or is your performance not contingent on the type of contract? What have you done to improve quality and processes due to the contract?

Investigative question ten: Does the requirement to obtain permission to utilize equipment on commercial contracts impede the contractor from obtaining commercial work?

Scope and Limitations of the Research

The purpose of this research was to provide some insight into the contracts for two privatized entities, and whether or not they were performing up

to expectations and if not, why? Is it due to the wrong type of contract being utilized, or just learning pains due to privatization. Is the contractor being allowed to perform as a privatized entity, or is the government shackling the contractor to the point where obtaining commercial work is not feasible, or not significant? The intent is not to look at every aspect of the contracts, but the very visible portions that directly incentivize or deincentivize the contractors. Through this effort future privatization contracts can be improved or can follow the same process and guidelines of the two researched in this thesis.

II. Background of the Issue/Review of the Literature

Chapter Overview

This chapter discusses the importance of privatization to the military, and why it is being pushed by the President and military leaders. Next, a brief overview of what Newark AFB and the Naval Air Warfare Center do for DoD, and how the privatization process occurred at both locations. Lastly, we will explore the different types of contracts available in government contracting, and the types of contracts allowed on the Navy and Air Force contracts with Hughes and Boeing.

General Issue

With the Cold War behind the United States, the U.S. government is looking towards reducing the cost of the military. Due to the reduction in military spending, the military is trying to find money to pay for modernization through outsourcing and privatization. The Deputy Secretary of Defense signed a memorandum on February 26, 1996 stating "Resources saved through these initiatives during the POM process will not be decremented from your outyear budgets and should instead be applied to your modernization priorities" (Office of the Secretary of Defense, March 1996: Appendix 2). Therefore, from the top of DOD they have stated that any savings will stay with that particular service. This

has been enough to encourage the military services to aggressively search for outsourcing and privatization opportunities. Unfortunately, there is not a 100% guarantee that Congress will not reduce the defense budget further, eroding our modernation efforts even more.

The Air Force's "Global Engagement: A Vision for the 21st Century Air Force" states the Air Force's core competencies of "Air and Space Superiority, Global Attack, Rapid Global Mobility, Precision Engagement, Information Superiority, and Agile Combat Support....As a result the Air Force is committed to outsourcing and privatizing many functions now performed internally" (Department of the Air Force, 25 March 1997: 4, 5). The Air Force sees outsourcing and privatization as a way to generate funds for modernization which allows it to increase its core competency of war fighting.

With outsourcing and privatization now given the heavy weight of being the issue to help solve the military's modernization dilemma, it is important to understand how it works and why it can and should save the military much needed funds. One area that is vital to a successful privatization effort is the initial contract. Understanding what works in our initial privatization contracts will help the acquisition community to better incentivize the contractor and help ensure successful privatization efforts in the future. Before we look at what types of contracts are available we must first understand what privatization is.

Outsourcing and Privatization Defined

According to the Defense Science Board Task Force on Outsourcing and Privatization, "'Outsourcing' refers to the transfer of a support function traditionally performed by an in-house organization to an outside service provider" (Office of the Secretary of Defense, August 1996: 7A). In outsourcing the government still provides oversight, but allows the contractor flexibility to how the job is performed.

Privatization is a subset of outsourcing. In privatization the government sells off the assets (government owned building, equipment) to a private company (or to the local community through a non-profit organization). This is where the term privatization comes from. It is the privatization of a public (government) function. This company then may or may not receive a contract from the government to purchase what the government use to make in-house. The importance of government support is crucial to the success of this company. The company's long term goal is to bring in commercial business to augment any government work they do. If the government does not continue to support the company, by purchasing its product, then the contractor may not be able to survive long enough to obtain ground in the commercial marketplace. This is the author's point of view of privatization. According to the Secretary of the Air Force, Sheila A. Widnall, privatization is "the transfer of government assets operations to the private sector (Widnall, 7 Feb 1996: 1). An academic answer by Sivas states that "Privatization is the act of reducing the role of government,

or increasing the role of the private sector, in an activity or in the ownership of assets" (Sivas, 1987: 3). Sivas mentions other forms of privatization, to include vouchers and grants (Sivas, 1987: 8), but the one form this research was concerned with was privatization-in-place (PIP). PIP is where the government sells off its assets and a private entity takes over from the government. Why look at this type of privatization? Because privatization in this form is what the military is focusing on for its depots and manufacturing facilities. The other forms of privatization are chiefly utilized outside of DOD.

The Importance of Privatization

The importance of privatization can be shown in the attention it has received. President Clinton is very much in favor of privatization because he believes it will save jobs and could create more. He told workers at Kelly AFB, where the depot is working towards privatization, that privatization will allow the City "to diversify its economic base" (Ripps, 6 April 1997: 1). Sheila Widnall has toured the Newark AFB depot section (taken over by Rockwell/Boeing, and has declared it a "success story" (Widnall,7 Feb 1996: 1) in privatization. For the President and higher level government officials success is keeping jobs at the site, therefore reducing the economic strain on the community. Whether or not the private company is successful will not be seen for a few years. The air Force's Air Force Material Command (AFMC) has announced that Kelly AFB and

McClellan AFB's depot work will be privatized. According to Major Carolyn Hodge, AFMC Public Affairs,

> Privatization allows the government to sustain operations with an essential capability to perform critical depot maintenance function, while industry infuses their commercial business practices and workloads to move toward a responsive, less expensive defense support posture. (Hodge, 6 Apr 1997: 1)

General Viccellio, AFMC Commander, stated that

> For the work force, the upside of privatization is that unlike other BRAC-directed closures, many of our former civil service employees could continue working in the same facilities, performing the same or similar jobs and using the same equipment - but as employees of private contractors. (Hodge, 6 Apr 1997: 1)

Just from these few viewpoints of privatization it can be seen that the leadership, from the President on down, realize the importance of the economic impact where these bases are located. By privatizing the public entity they hope to continue the workers employment, utilize their skills, and then hope the new private company will find commercial markets to diversify into. If this does not work then the DOD's modernization efforts may be futile.

With our little privatization experience here in the United states we must import it from abroad. The leader in privatization is Britain. Their vast privatization experience has propelled them as a vast resource of information and know how. There it started with the Churchill administration of 1951-55 where industries were handed back to their original owners, but soon the idea of privatization came where a public entity would be turned over to a private company. The government thought that private sector companies outperformed

public sector entities because of economic realities. Even with this start privatization did not come out to the forefront until 1979, when the Thatcher government transferred one by one government owned entities to the private sector (Pirie, 1988: 9). Some of these included British Rail hotels, English Channel Ferry Services, and oil stockpiles (See Appendix B) (Pirie, 1985: 27-31). With Britain's leadership over 100 countries have utilized privatization as a strategy to saving money and reducing government run entities. Over half of these countries have sent teams to learn from their experiences. Of all these countries the US federal government is the one making the least progress in this area (Pirie, 1988: 306). The U.S. at that time (1986) was looking at the privatization of the Boneville Power System, two oil fields, Amtrak, and others, but they bogged down in Congress (Pirie, 1988: 307). The military is utilizing privatization as an alternative to closing the base or unit, thus saving some or most of the jobs, and creating savings to be used for modernization. These first federal privatization efforts in the U.S. will hopefully help alleviate many fears people may have and allow the government to rid itself of non-core government activities. Before we discuss the privatization efforts at Newark AFB and NAWC we first need to understand what both entities do for the Air Force, Navy, and communities.

Newark AFB

Newark AFB opened in the 1950s to perform depot maintenance, and metrology and calibration. The General Accounting Office states that Newark AFB:

> provides depot level maintenance of inertial guidance and navigation systems and components and displacement gyroscopes for the Minuteman and Peacekeeper intercontinental ballistic missiles and most of the Air Force's aircraft....In fiscal year 1994... almost 10,500 items were produced to support repair requirements for 66 Air Force, Navy, and Army systems and components....In its second Air Force mission, metrology and calibration, AGMC performs overall technical direction and management of the Air Force Metrology and Calibration program and operates the Air Force Measurement Standards Laboratory. (GAO, December 1994: 1-2)

In 1996 the Air Force signed two contracts with contractors to perform the workload at Newark AFB: Rockwell signed a $264 million contract to perform the depot work (Boeing took over Rockwell in 1997), and Wyle signed a $19 million contract to perform the lab work (Irwin, 1996).

Before privatization the base employed over 1,500 people and had a 200 million dollar economic impact on the region (Pidgeon: 1996, 3). The average employee makes $40,000 per year, which is much higher than the average wage in this area. Due to the City of Heath and the City of Newark's relatively small (compared to Indianapolis) combined population of roughly 50,000 people, the economic impact of Newark AFB is vital to the regions economic stability. At this time the base employs 799 people (Irwin: 1996).

The base encompasses 70 acres, with 37 buildings. The main building, where the depot is located, covers 12 acres (Pidgeon: 1996, 7). It can be seen from the economic standpoint that Newark AFB is extremely vital to the region. Now, how does Newark AFB compare to NAWC?

Naval Air Warfare Center (NAWC)

The Naval Air Warfare Center-Aircraft Division, Indianapolis (NAWC-ADI) opened in 1942. The center "designs and produces advanced electronics and aviation equipment for aircraft, ships, satellites, and other military vessels and machinery" (Wheeler, 1996: 5). The facility sits on 162 acres, and the main manufacturing building encompasses 17 acres under one roof. NAWC employs 2400 people and is one of the top 15 employers in the City. The economic impact is over $1 billion a year. The average wage is over $45,000 a year, and over half of NAWC employees have at least a 4 year college degree. According to Wheeler:

> NAWC-ADI is the only military facility with the resources and knowledge base to take avionics and electrical equipment from the conceptual stage to a finished product. NAWC-ADI's expertise in design and product development saved the military more than $200 million in the 1990s. (Wheeler, 1996: 7)

As you can see from the economic aspects, the City could not afford to lose the economic force of NAWC by the facility closing down and the workers leaving Indianapolis for other work. We will now touch upon the history of privatization at Newark AFB and then NAWC.

Privatization at Newark AFB

In order to understand where we are at in the present, we must understand where we came from. Fortunately, Captain Pidgeon's thesis on the privatization of Newark AFB provides a great source of information on this topic and is used almost exclusively for this summary. The Base Realignment and Closure Commission (BRAC), on 1 July 1993, approved the DoD's recommendation to close Newark AFB, and the process to fight the closure began (Pidgeon, 1996: 1). From this point on the City fought for privatization while political leaders continued to argue for keeping the base open. On 2 Jul 1993 President Clinton announced his Five Part Program for Revitalizing Base Closure Communities. This would be significant in pushing everything towards privatization. It put the idea of privatization in the forefront of thought amongst the brass in the Pentagon by putting local development first when disposing of government property (Pidgeon, 1996: 36). Employees were told of the opportunity to receive help from the state and receive priority for other government jobs. This became a concern for those that wanted privatization, because one of the pluses of privatization was utilization of the current workforce. If the highly trained workforce leaves then it may become cost prohibitive for a private entity to take over (Pidgeon, 1996: 43).

On 18 Aug 1993 the Heath City Council formed the Reuse Commission whose primary goal was to work towards privatization-in-place . They would find

the going tough because the Air Force's goal was to fill a need, and that did not necessarily mean through privatization. On 3 Sep 1993 AFMC formed an Integrated Product Team (IPT) that was to look at three options: "1) privatization-in-place , 2) privatization at contractors' facilities; and 3) transferring the workload to other Air Force depots" (Pidgeon, 1996: 45). On 13 Oct 1993 the IPT stated that privatization-in-place was an "acceptable risk" (Pidgeon, 1996: 49), but there is not an obligation to any one approach. This angered the Reuse Commission because they believed that President Clinton's Five Part Program was clear that the Air Force should lean towards what the community wanted. (Pidgeon, 1996: 50) The IPT was then tasked to provide the costs for each option by December 1993. While waiting for the IPT's results the community grew anxious, for the longer it took to make a decision the more people that would leave the area for other jobs. The government encouraged the workers to not delay their job searching and encouraged them to take advantage of state and federal assistance (Pidgeon, 1996: 52). During the wait the Congress passed the Base Closure Community Assistance Act which gave the Secretary of Defense authority to transfer base closure property for at or below estimated fair market value (Pidgeon, 1996: 59). This was important since the estimated value of the property was $331 million, and the City might not be able to afford it (Pidgeon, 1996: 59).

On 31 Jan 1994 the Newark AFB public affairs issued a news release stating that privatization-in-place was AFMC's preferred option. (Pidgeon, 1996:

60). The release stated that Major General Eickmann, AFMC's Director of Logistics, stated that two events would have to occur if privatization-in-place would become a reality: 1) there would have to be sufficient contractor interest, and 2) the work would have to be done at a "competitive price" (Pidgeon, 1996: 61).

"In April 1994, DoD announced its guidelines" to allow the community to obtain the property for as little as free (Pidgeon, 1996: 67), but other events would create more anxiety for the prospects of privatization. In the 10 May 1994 edition of the Commerce Business Daily, the Air Force published a sources sought synopsis which stated that the Air Force intended to contract the work, at Newark AFB, in a privatization-in-place concept. What made the Reuse Commission nervous was an amendment to this release which stated that they would also consider proposals to accomplish the work at contractor facilities (Pidgeon, 1996: 69). This change was made due to contractor input. Contractors' believed they would be able to conduct the work for less money at their own facilities (Pidgeon, 1996: 70). The Air Force saw this as a good business decision, while the community saw this as a way for contractors to defeat privatization-in-place .

Another reason for the community to worry was that the Air Force was only looking at a one year contract, plus 4 option years. So, there was only a guarantee for one year and then the contractor could just pull out, which would

leave the City with the an estimated $4 million a year maintenance costs on the property (Pidgeon, 1996: 72).

Starting in February 1994 a team made up of contracting personnel, Newark AFB personnel, and customers worked together on determining how to write the contract for privatization-in-place and making sure the transition was smooth. Industry leaders were asked of their opinion and the team was told that they would rather see the work moved to other locations where excess capacity existed. The team did not feel that industry had taken into consideration the serious risks of moving the work to other locations. The Air Force issued the draft request for proposal (RFP) on 17 Jan 1995. The draft RFP defined the work the contractors would bid on, and gave the contractors a chance to make comments on the contract. The community did not like it because it did not stipulate that the work would be done in place (Pidgeon, 1996: 90). They also had concern that the draft RFP did not specifically allow the contractor to use government furnished equipment on commercial workloads (Pidgeon, 1996: 93). Industry provided more than 300 comments on the draft RFP, and from these comments more than dozen major changes were made (Stipe, 1996). This delayed the release of the RFP to 3 May 1995. The response to the RFP was important to see if the Air Force would obtain a competitive price, which was the second requirement for privatization (Pidgeon, 1996: 100).

The team agreed to utilize a Indefinite-Delivery Indefinite-Quantity type contract, with the majority of line items being cost-reimbursable. The reason for

the use of cost-reimbursable line items was that the actual cost to perform the work was impossible to determine.

At a DoD conference, on 26 and 27 Oct 1994, the DoD explained how they would determine the cost of base closure property. They would charge depending on how much job creation would be expected. This made the community nervous because it meant that it probably would have to pay something for the property, especially since job creation is the basis for privatization. The City was concerned that by taking on the potentially high cost of purchasing the property, and paying the high maintenance costs, that if anything went wrong with the Air Force contract it would bankrupt the small community (Pidgeon, 1996: 76). This concerned the DoD, and they realized the importance of this issue.

During this same period several companies showed interest in performing the work in place. This seemed to cover one of the stipulations that there must be sufficient contractor interest (Pidgeon, 1996: 79-80).

A Port Authority was formed, on 21 Feb 1995, to be in charge of the privatization effort, and handle the running of the old Newark AFB when the Air Force leaves. The biggest worry the members had was about attracting commercial work to Newark AFB. This concern was caused by the chance that privatization may not occur. If this were to be the case, then how would the local community afford the ownership responsibilities? It would be a huge liability until commercial business comes in. There was concern that the work that Newark

AFB performed would not easily transfer to the commercial sector (Pidgeon, 1996: 98).

The cost savings to close the base was being questioned by the General Accounting Office (GAO) and Senator Glenn. The December 1994 GAO report stated that the DoD should revisit the decision to close Newark AFB. Senator Glenn sent a letter to Secretary Widnall asking her to revisit the closure. On 7 Feb 1995 she replied that it was in the Air Force's best interest to close the base and that there was not any information to indicate they should do anything different (Pidgeon, 1996: 104). The senator was not happy with this reply and went to the Deputy Secretary of Defense, but this did not provide him the action he wanted. Meanwhile, Mr. Horton, from the Port Authority, was worried about efforts of Senator Glenn and other politicians to keep the base open. He believed that it was more important that all energies be involved in the privatization effort, and that employees know that a job will be there for them. Mr. Horton stated "My concern is that unless we keep pressing on and placing all our effort on assuring privatization-in-place , we may well end up seeing the base closed and the workloads moved out" (Pidgeon, 1996: 107).

Senator Glenn and Dewine went to the 1995 BRAC for one last plea. Senator Dewine stated that the GAO said that it would cost more to privatize than to close the base, therefore the base should stay open. The BRAC stated that they wanted to wait for an Air Force decision on whether they were going to continue with the privatization process. On 21 Jun 1995, the Air Force made

their decision to proceed after looking at RFP responses that showed that they would be able to obtain a competitive price (Pidgeon, 1996: 113). Six months later, 15 Dec 1995, the Air Force issued the first U.S. military privatization-in-place contract (Pidgeon, 1996: 114). Next, we will discuss how privatization was done at the Naval Air Warfare Center (NAWC).

Privatization at the Naval Air Warfare Center (NAWC) - Indianapolis

The City of Indianapolis hired the Hudson Institute to prepare a case study to document the process the City went through to privatize NAWC. Mr. Wheeler and Ms Walcott were the researchers involved in assembling the information and the following is a summary of privatization of NAWC utilizing their efforts. While the Newark AFB community and politicians were continually trying to stop the closure of Newark AFB, the City of Indianapolis saw it as an opportunity and from the start tried to obtain support for privatization. From previous closures, Indianapolis saw that, "despite protests from affected communities and their Congressional representatives" (Wheeler: 1996, 7), they still were closed. In 1992 Indianapolis Mayor Stephen Goldsmith became concerned that NAWC might be closed by the 1993 BRAC, but despite heavy scrutiny it survived. There was a feeling though that NAWC would not survive the 1995 BRAC, and therefore, the City continued to discuss alternatives with the Navy. These alternatives included making NAWC a distribution center, downsizing and

privatization, or for NAWC to become a government-owned contractor-operated facility (GOCO) (Wheeler, 1996: 8-9).

In early 1994 the Navy head of Logistics stated he wanted to discourage privatization, and he wanted to disperse the workload to other Navy facilities. Despite this high level view, Indianapolis continued its efforts. Unlike Newark, Indianapolis has had much experience with privatization of City services, and wanted the opportunity to present the privatization option formally. The Mayor proposed a "mix of public and private entities" (Wheeler, 1996: 9), but the military was not sure how to implement this type of procedure. The City also proposed a plan to consolidate with the Naval Surface Warfare Center (NSWC), Crane Division, Crane Indiana, but the Navy found this partnership unworkable. The Crane Division is a Navy facility that is responsible for "acquisition, engineering, logistics, and maintenance for the Fleet's weapon and electronic systems, ordnance, and associated equipment and components" (Crane Division, 10 Jul 1997: 1). When the 1995 BRAC staff members were briefed by the Indianapolis team they found the staff members receptive and the team was told to provide a "white paper" before March 1995 (Wheeler, 1996: 10).

On 28 Feb 1995 DoD released its recommended closure sites and Indianapolis was not spared. In a April 1995 BRAC meeting the Mayor of Indianapolis went against the tide. Over 200 representatives of closed, or proposed to be closed, sites came to the meeting to argue why their site should stay opened, except for the Mayor of Indianapolis. He stated "go ahead and

close us, but do it in a logical way" (Wheeler, 1996: 11). The Mayor then proposed a plan stating how the privatization process should work, from closing the facility as a DoD site to the City assuming "ownership of the site, facilities, and equipment and [that they] would be responsible for operating and maintenance costs" (Wheeler, 1996: 11-12). He also stated that the public-private partnership would provide the Navy a one time savings of $180 million and an annual savings of $12 million, and create 800 to 1000 new jobs. The Mayor was very prepared and provided the BRAC Commission a business plan from Arthur Anderson, a Hudson Institutes critique of the Navy's analysis on why it should be closed, letters from satisfied NAWC customers, and letters from Indiana's Congressional delegation. Before the Mayor's briefing some of the commission members were skeptical of NAWC's value, but the Mayor's presentation and supporting materials started to convince them otherwise (Wheeler, 1996: 11). The "Commission Findings and Recommendations" was issued on 14 Jul 1995. It stated that the City of Indianapolis had proposed a public-private partnership and the Commission recommended that the Navy transfer the workload, facilities, and equipment to the City, or relocate work to other Naval facilities. The report emphasized the public-private ownership. The City saw this recommendation as a half success and feared the Navy would not think twice about moving the workload away from NAWC (Wheeler, 1996: 12).

Certain events prevented this from occurring. One was President Clinton's negative reaction to the recommended closure of Kelly and McClellan

Air Force Bases. The President wanted privatization to be utilized as an alternative to closure. This request by the President made the Navy take a closer look at possibly privatizing NAWC. Also, the City of Indianapolis' well thought out proposal and the increased costs to close NAWC increased the attractiveness of privatization. Lastly, NAWC was not a depot and therefore did not have to comply with federal depot restrictions, and NAWC's expertise in electronics would be marketable in the civilian market (Wheeler, 1996: 13).

In August 1995 the Mayor established the Reuse Planning Authority to manage the base closure and privatization process. A meeting with the NAWC technical director came with an agreement that 80% of the problems must be resolved before going ahead with privatization. By October 1995 the major issues were pared down to ten. A team was assigned to each issue to come up with solutions. Two issues were especially delicate: the first involved the difficult issue of resolving the legal problems of government and private employees working on common projects. They had to be especially careful to avoid conflict of interest statutes and being labeled as a "procurement official," which may have barred them from working for the new private entity. Second was the issue of protecting employee benefits. Legislation was passed, by the Indiana Legislature, in order to protect these individuals to allow them to participate in the privatization (Wheeler, 1996: 14). The Legislature set out to provide them benefits to make up for the ones the workers were to lose once they become contractor employees (for instance time accrued towards retirement). Ultimately,

the 80% solution came down to four basic questions. The first was "What stays, what moves?" The Navy determined that all projects would stay at NAWC. Second was the issue of "What functions the federal government must keep at NAWC-ADI?" The government/private employee mix scenarios went from 1600 government/1150 private to 600 government/2000+ private. This issue threatened the privatization effort because the Navy wanted to minimize the number of Navy employees on site. The final agreement was to reduce the amount of Navy employees to under 200, and by 1997 remove all Navy employees. The next issue involved the form of contract to use. The issues involved whether to have multiple businesses or one integrated business, and what form and length the contract should be? They ended up agreeing to a integrated contract that would take the form of a indefinite delivery indefinite quantity (IDIQ) type contract. The Navy required the City to provide a business analysis. The Hudson Institute was tasked to focus on major risks and the business potential. Arthur Anderson prepared a preliminary business feasibility plan. They tried to determine whether bringing commercial work would jeopardize the work performed for the Navy. The results showed that there was commercial potential and capacity to handle more work (Wheeler, 1996: 16).

In November 1995 the City and Navy came to a basic agreement. The City would run a competition for a private company to take over NAWC, and the Navy would then negotiate a contract with the selected company or companies. Another important part of the agreement was that privatization would be moved

up to start in 1997. Since NAWC had to be closed by 2001, this gave the Navy time to move the workload, in case privatization failed (Wheeler, 1996: 17).

The City issued the Sources Sought Synopsis on 22 Dec 1995. The Solicitation did not dictate what the contractor would do, but instead stated what kind of outcome the City wanted, and asked the contractors to come up with creative solutions of their own to achieve those ends (Wheeler, 1996: 17).

On 18 Jan 1996 a respondents conference was held that allowed the contractors to see NAWC first hand, and ask any questions they may have. All questions and answers were then posted on the Internet for all to see (Wheeler, 1996: 18).

In Feb 1996 seven companies responded to the Solicitation. The review group analyzed the responses, asked each to answer some questions, and to come to Indianapolis and be prepared to discuss the questions, and negotiate every aspect of their proposal. At this point the review group reduced the seven companies to four. The review group visited two sites, for each company, to see how their business units were run. After a series of visits and additional questions Hughes was unanimously chosen. On 25 Sep 1996, the Navy negotiated a workload contract with Hughes (Wheeler, 1996: 18-19).

Hughes agreed to employ 2000 workers, when it was to take over in Jan 1997, and to increase employment to 3000 workers by 2002. Current workers, who obtained jobs from Hughes, also would receive the same or better wages than before (Wheeler, 1996: 19).

On 25 Sep 1996 the IDIQ contract was negotiated between the Navy and Hughes for one year plus four one year options. Anybody within the government could place orders on this contract (Wheeler, 1996: 20).

The City has two five-year options, with the Navy, for the facility and equipment. Each year the City will pay the Navy $1 for the facility and another $1 for the use of the equipment. Hughes will gain title to the facility and equipment as soon as the City obtains title from the Navy, but the City will retain the title to the undeveloped land to develop as it sees fit. The City will not obtain title to the facility and equipment until the environmental issues have been cleared up.

Upon Hughes takeover of NAWC, on 5 Jan 1997, the name was changed to the Hughes Air Warfare Center (HAWC).

Types of Contracts

In order to understand the Navy and Air Force contracts with Hughes and Boeing you must understand what types of contracts are available in the government and when they are typically utilized. When it comes to government contracting there are two types of contract families available: cost-reimbursement and fixed. The cost-reimbursement type contract pays the contractor for all allowable expenses incurred in the performance of the contract. The fixed type contract pays the contractor a set amount after the work is completed (Cibinic and Nash, 1986: 706).

The purpose of the fixed type contract is to provide an end item. The cost type contracts may or may not mandate an end be provided. Deciding which contract type to utilize depends on the risk involved. The fixed type contract puts the risk on the contractor to provide an end product, at a certain pre-determined date. If the contractor spends more than he is being paid on the contract then he suffers the losses. On the other hand, if the contractor spends less than the contract amount, then the difference is pure profit. By assuming more of the risk the contractor has a chance to obtain greater than normal profits. An analogy would concern investments. The more risk someone takes in their investments, the better the return, or loss (as in stocks). The lower the risk, the lower the gain or loss (as in Government savings bonds).

In a cost-reimbursement type contract the contractor may not have an incentive to reduce costs because he will be reimbursed for all allowable expenses, and the contractor is not obligated to continue working if the government does not continue to furnish funds. Also, according to Cibinic and Nash "it is extremely unlikely that the contractor would incur any liability for defective or untimely work" (Cibinic and Nash, 1986: 705).

Between pure cost-reimbursement and fixed type pricing arrangements are many different versions of these type of contracts. Which contract type to use depends on the circumstances and risk. Contracting officers utilize the Federal Acquisition Regulation (FAR), pricing guides, and experience to determine what type of contract will fairly spread the risk and incentivize the

contractor to perform. What is the objective on selecting the contract type? According to FAR 16-103(a)

> The objective is to negotiate a contract type and price (or estimated cost and fee) that will result in reasonable contractor risk and provide the contractor with the greatest incentive for efficient and economical performance.

In light of this, a firm-fixed-priced contract will be utilized when the risk involved is minimal and predicted with an acceptable degree of certainty. If a fixed-priced contract is selected and the risks are beyond the contractor's control, this will increase the contract price and reduce competition (AFIT and FAI, 1996: Ch 2, 41). On the other hand, if a cost-reimbursement contract is selected, when the risks are within the contractors control, then the contractors motivation to control costs will be reduced.

Fixed Type Contracts. Depending on the degree of risk involved there are several iterations of fixed and cost type contracts. The first is the firm-fixed-priced (FFP) contract. There is little risk because the cost of performance can be estimated with a high amount of confidence, therefore, the contractor assumes the little risk there may be. The FFP contract is used on requirements that are well defined, the contractor is experienced, the market is stable, and any financial risks are insignificant. The contractor is required to provide a service or product at a certain time, at a certain place, at a fixed cost (stipulated in the contract). The contractor is incentivized by the fact that every dollar saved is a dollar that goes directly into profit. This type of contract is mostly utilized for

commercial supplies and services, and is not generally recommended for contracts involving research and development (AFIT and FAI, 1996: Ch. 2, 42) (FAR: 16.202).

A variant of the FFP is the firm-fixed-price level of effort (FFP-LOE) contract. The government pays the contractor a fixed amount to provide a certain level of effort. The work is to be done over a stated period of time and the work can only be stated in general terms. This type of contract is normally utilized in the research and development area, and payment is based on the effort expended rather than any results. FFP-LOE can only be used when the work cannot be clearly defined, the level of effort is identified and agreed upon in advanced, and there is reasonable assurance that the intended result cannot be achieved with less effort. The contract must also be for less than $100,000, but this requirement may be waived by the chief of the contracting office (FAR: 16.207).

If market prices for labor and/or materials is going to be highly volatile, over the life of the contract, then a fixed priced economical price adjustment (FPEPA) contract may be utilized. This type of contract is utilized when the items, that are volatile, are severable and significant. The risk must be market wide and beyond the contractor's control, and the cost to administer the FPEPA contract is worth it. The FPEPA is normally utilized on long-term contracts, for commercial products, where there is a period of high inflation (AFIT and FAI, 1996: Ch 2, 42).

The next type is the fixed-price incentive fee (FPIF) contract. In this type the material and labor requirements are moderately uncertain. The contract has a ceiling price which accounts for the risks involved. Included in the contract is a profit sharing formula that motivates the contractor to control costs. The contractor is incentivized to control costs by realizing a greater profit by completing the work at below the ceiling cost. The typical application for this type of contract is for production of a major system based on a prototype. In order to use the FPIF contract the contractor must have an adequate accounting system (AFIT and FAI, no date: Ch 6, 7).

The fixed price award fee (FPAF) contract is utilized when "judgmental standards can be fairly applied." The potential fee must be large enough to provide a sufficient incentive and to justify the cost of administering a FPAF contract. The government may use the FPAF contract when the acceptance of the final product would be judgmental and a risk of the user not being fully satisfied. A subjective award fee plan, based on performance, is put in place and a Fee Determination Official decides how well the contractor met the standards in the plan. Depending on the contractor's score the contractor will receive a portion or all of the award fee. The contractor is obligated to perform at the time, and place for a fixed amount stipulated in the contract. The contractor is incentivized to reduce costs because for every dollar saved is one dollar more towards profit, and the contractor earns an additional fee depending on how well it satisfies performance standards (AFIT and FAI, 1996: Ch 2, 43).

The last type of fixed price contract, to be mentioned here, is the fixed price prospective redeterminable (FPPRD). The FPPRD "may be used in acquisitions of quantity production or services for which it is possible to negotiate a fair and reasonable firm fixed price for an initial period, but not for subsequent periods of contract performance" (FAR: 16.205-2). The government uses FPPRD in order to obtain a firm commitment, from the contractor, to deliver supplies or services in subsequent years. A typical application would utilize FPPRD for a long-term production of spares for a major system (AFIT and FAI, 1996: Ch 2, 43) (AFIT and FAI, no date: Ch 6, 7).

Cost-Reimbursable Type Contracts. The next category of contracts to be covered is cost type. In this category is the cost-plus-fixed-fee (CPFF) contract. The CPFF contract is utilized when "formulas relating fee to performance (e.g. to actual costs) would be unworkable or of marginal utility" (AFIT and FAI, 1996: Ch 2, 44). The elements of the contract include an estimated cost and a fixed fee. The contractor is obligated to make a good faith effort to complete the work within the estimated costs. The contractor is incentivized by obtaining a higher percentage of profit by reducing costs (cost to fee percentage). A typical application would be for a research study. As for all cost type contracts, the contractor must have an adequate accounting system in order to keep track of all costs. The downside of CPFF contracts is that the

contractor may attempt to shift costs of other contracts unto the CPFF contract in order to control costs on other contracts.

The cost-plus-incentive-fee (CPIF) contract is similar to the CPFF, in that the amount of labor hours and materials are speculative at best. You use the CPIF when a objective relationship can be found between the fees and performance measures, such as delivery dates and performance benchmarks. The contractor is incentivized by being able to realize a higher fee by completing the work at a lower cost and/or by meeting or exceeding the performance targets. A typical application is in research and development of a prototype for a major system (AFIT and FAI, 1996: Ch 2, 44).

The cost-plus-award-fee (CPAF) contract offers an award fee incentive similar to the FPAF. The CPAF's award fee is determined just like the FPAF's award fee. The Fee Determining Official follows performance standards to determine how much of the fee the contractor will obtain. The CPAF is utilized when objective incentive targets are not feasible and "judgmental standards can be fairly applied." The contractor is incentivized by meeting judgmental performance standards. A typical application of the CPAF is on large scale research studies (AFIT and FAI, 1996: Ch 2, 44).

The cost or cost sharing (C/CS) type contract is utilized when the labor hours, labor mix, and material requirements are highly uncertain and the contractor expects substantial benefits from the achievement of the end result. The contractor is incentivized by the fact that it is sharing the costs and it will

receive benefits from the product. A typical application is for joint research with educational institutions.

Labor-hour and time-and-materials type contracts do not fit either type exactly, but are considered to be part of the cost-reimbursable contract family because they reimburse the contractor for actual hours worked (AFIT and FAI, no date: Ch 6, 6). The labor hour contract pays the contractor for labor hours expended. The labor-hour contract is utilized when the labor rates can be determined, but the amount of hours to complete the job cannot. The labor hour rate includes the contractor's profit and overhead. Also, there is a ceiling price the contractor cannot go over without approval. The contractor is incentivized by a "fixed rate and flexible hours to perform a task with unknown elements." A typical application is to conduct emergency repairs to heating or cooling plants, and aircraft engines. The time and material contract works the same way except there are materials involved. The government pays the contractor the exact cost of the materials, which does not include profit and overhead (AFIT and FAI, 1996: Ch 2, 45). All profit and overhead is included in the contractor's labor rate.

Indefinite-Delivery Indefinite-Quantity (IDIQ) Contracts. An IDIQ contract is utilized when the minimum quantity needed is known, but the exact amount is unknown. The contractor is guaranteed to receive orders up to a certain amount. If the government does not order the minimum amount the contractor will receive it anyway, therefore it is important for the minimum amount

to be fairly certain. The government issues delivery orders off the IDIQ when needed, which is where the "indefinite delivery" comes from. Each delivery order is considered its own stand-alone contract, and the IDIQ contract will stipulate what types of contract vehicles can be utilized on the delivery orders. The contract types run the spectrum of contracts previously mentioned in the fixed and cost-reimbursable contract sections. The contractor is obligated to "provide acceptable deliverables at the time and place specified in each order at the per unit price, within any ordering limits established in the contract." Normally the IDIQ is utilized on long term contracts for commercial supplies and support services (AFIT and FAI, 1996: Ch 2, 42). In support services the minimum may be established as labor hours ordered.

The Navy Contract With Hughes

The success and transition into privatization depends a lot on how the contracts perform. A contract type that is "most likely to motivate contractors to perform optimally should be selected" (OFPP, April 1996: Ch 6) The Navy and Air Force decided to utilize a Indefinite Delivery Indefinite Quantity (IDIQ) contract. According to the Federal Acquisition Regulation (FAR) 16.504:

> An indefinite-quantity [IDIQ] contract provides for an indefinite quantity, within stated limits, of supplies or services to be furnished during a fixed period, with deliveries or performance to be scheduled by placing orders with the contractor...An Indefinite-quantity contract may be used when the Government cannot predetermine, above a specified minimum, the precise quantities of supplies or services that will be required during the

> contract period, and it is advisable for the Government to commit itself for more than a minimum quantity. An Indefinite-quantity contract should be used only when a recurring need is anticipated. (FAR: 16.504)

In both cases the IDIQ was for one year, plus four option years. The Navy and Air Force have different contract types authorized on the contract and have certain ways of ordering off the contract. The following is an overview of the ordering procedures of each contract, and where the contract types are utilized.

At the Hughes Air Warfare Center (HAWC) the Navy utilizes the "Alpha Acquisition" process to go from beginning to end on the delivery order process. The decision on which type of contract vehicle to use is decided upon many factors, which will be addressed later when we touch upon each contract type allowed under this IDIQ. The "Alpha Acquisition" process begins upon the user determination that they need a requirement fulfilled. At this time Hughes and the customer meet and negotiate a rough estimate on the costs. The customer then forwards the packet to its ordering officer. The ordering officer is approved by the Procuring Contracting Officer (PCO) to sign delivery orders (DOs) under this contract, and is a warranted contracting officer. The ordering officer finalizes negotiations and then signs the DO. A copy of the DO is sent to the Administrative Contracting Officer (ACO), located at DCMC-Indianapolis (at the HAWC), so the DO progress can be tracked and to keep track of total hours ordered on the contract. Clause H-1, in the basic contract, sets forth the process of placing orders on the contract (see Appendix C). The following contract types are authorized on this IDIQ contract:

Cost-Plus-Fixed Fee (CPFF): The CPFF contract type provides Hughes a fixed fee of 7%. The labor rates are just estimated and could be exceeded. The reason for this type of contract being authorized is because Hughes wanted the ability to utilize this type of contract for its customers. This type though must be authorized by a PCO before it can be utilized.

Time-and-Materials (T&M): The T&M contract type provides for 8% profit and O/H, on the labor, to the contractor. The reason for adding this contract type is due to customer interest in a method which the customer pays the actual cost of materials and a set dollar amount, which includes 8% profit, on each hour authorized. This type of contract is good for those DOs which require the use of a large dollar amount of materials.

Firm-Fixed-Price (FFP): The FFP contract provides for a 12% profit to the contractor. The FFP contract type is being utilized in areas where it is repeat manufacturing. As long as there is a good data packet, which means they have a reasonable idea what it will cost, they will use FFP. Six DOs have been issued so far as a FFP contract.

Fixed-Price Level-of-Effort (FP-LOE): By utilizing this method the Navy is putting some of the cost risk on Hughes. Hughes agrees to accept a fixed hourly cost for labor, while the Navy takes the risk that Hughes will not be able to provide an end product in the amount of hours agreed upon in the DO. This type of contract incentivizes the contractor to complete the work in less time than in the DO. If Hughes utilizes anywhere from 93 to 100% of its authorized

hours, and completes the work, then it can still bill the government for 100% of the agreed upon hours stipulated in the DO. The contractor though must notify the ordering officer upon utilizing 75% of the authorized hours, and cannot go over 100% without the ordering officer's approval.

The Air Force Contract with Boeing

Boeing obtained the IDIQ contract and commenced operations in October 1996. As with the HAWC contract there is no written procedures on which type of contract to utilize. When a customer needs something done, the contractor provides a proposal to the ordering officer that includes a recommended contract type. If needed, the Defense Contract Management Command - Newark (DCMC) reviews labor rates. Then the package is forwarded to either the PCOs at Hill AFB, who handle the DOs for the ICBM, F-4, and F-16 requirements, or any number of ordering officers around the country. There are three Procuring Contracting Officers (PCOs) in charge of the contract at Hill AFB. They are located under the contracting directorate (PK). Ordering officers include one in the Missiles SPO, and one in the F-16 SPO at Hill AFB, UT. Also, there are two at Tinker AFB for most aircraft systems, and Advanced Cruise Missile, and one at NAVICP-M for the Navy Dual Miniature Inertial Navigation System (DMINS). All those placing orders must be warranted contracting officers. While the PCOs can change anything on the basic contract and DOs, the ordering officers can only change quantities on the DOs. After the ordering officer, or in some cases

the PCO, negotiates an amount for the DO, the ordering officer must obtain a Job Control Number (JCN) from the PCO. The ordering officer gives the PCO the delivery order number and the estimated dollar amount (if it is a cost type contract you do not know exactly how much it will cost, thus it is estimated) to make sure they are within the dollar limits of the contract. The contractor is not allowed to accept a DO without a JCN. The contractor must give the ordering officer 60 days notice of expending 75% of the delivery order amount. Besides notifying the ordering officer of the 75% mark, the notice tells him/her whether or not additional funds will be required to complete the project. As for contract type, the DOs can have one or a mixture of contract types, but most of the DOs are cost-plus-award-fee (CPAF).

The government wanted to focus the contractor on subjective issues, like program management, procedures, skills, support, quality and repair performance, and cost performance. Most of these issues could not be measured quantitatively, so a cost plus incentive or fixed price incentive was not appropriate. The award fee method was chosen because it allows subjective criteria for evaluation. Before deciding on what type of contract to use the PCO met with industry to see what they thought it should be. The ultimate decision on the type of contract was made by the Principal Deputy Assistant Secretary of the Air Force for Acquisition and Management in SAF/AQ (in The Pentagon). From this information the following contract types were decided upon.

Cost-Plus-Award-Fee (CPAF): Through the CPAF the contractor can earn an award fee of 0 to 10% of costs incurred. According to one of the PCOs, this type is utilized when there is rate risk and when rates are unsettled. In other words they do not know how much the hourly cost of labor is going to be. The cost type contract was chosen for most of the line items (or CLINs) because the data generated at Newark AFB was considered to be unreliable for use by a private contractor for generating a reasonable proposal.

Time-and-Materials (T&M): The contractor earns a 10% profit, on labor, when the DO calls for a T&M contract. This is utilized when the exact amount of hours needed cannot be determined, but the labor rates are determined. This type is useful for non-continuous engineering efforts and other non-continuous efforts.

Fixed-Price-Award-Fee (FPAF): The contractor can earn an award fee anywhere from 0 to 10% of the total amount of FPAF contracts awarded. This type is utilized when the contractor knows how many hours it will take to do the job and the rates have been determined. The FPAF contract type had not been utilized as of 17 June 1997. To use it the government would need the cost history. If enough work is done in an area the government and contractor may be able to develop a good idea of cost and thus shift the risk over to the contractor by utilizing a FPAF contract. The problem at Newark AFB is that the accounting system the government used was different than what contractors use. The government accounting system did not capture all the overhead costs

involved in producing an end product. The FPAF line items were provided in order to account for those items which they considered the effort more reasonably estimated. These line items only accounted for 2.1% of the total line items on the basic contract.

Cost-Reimbursable: This line item reimburses the contractor for authorized travel and subsistence expenses.

In Chapter Four, Results and Analysis, we will discuss the results of interviews and documentation on how the contract types are working and how the contractor is incentivized.

III. Methodology

Chapter Overview

This chapter reviews the research objectives that must be met to complete the study. Next, the method for the study will explain why the case study format was chosen. The research design section discusses how the study will get from the study's questions to the final interpretation of the findings. Next, the chapter covers how the researcher will try to increase the validity and reliability of the study. Lastly, the reality of bias will be discussed. The introduction of bias into research can be a problem, and this section discusses how bias was dealt with.

Research Objectives

This research will meet several objectives to find out how the contractors are being incentivized or deincentivized, and why the contracts are working or not working in this area.

First, the events leading to the decision on why certain contract types were chosen will be examined. This will be determined by documentation from both acquisition strategies and interviews of the procuring contracting officers (PCOs).

Second, the current successes and failures of both contracts will be determined by interviews with the PCOs, ACOs, ordering officers, and contracting personnel.

Third, through the information provided above, we may be able to determine what may be improved, or looked at more closely, in future privatization efforts.

Method

According to Yin, there are five different research strategies that can be utilized: experiment, survey, archival analysis, history, and case study (Yin: 1989: 17). The case study approach was decided upon because we want to know "how" or "why" the contracts are incentivizing or deincentivizing the contractors, and therefore why the contracts are working or not working (Yin, 1989: 18).

Yin states that there are three conditions that determine which strategy to utilize: "(a) the type of research question posed, (b) the extent of control an investigator has over actual behavior events, and (c) the degree of focus on contemporary as opposed to historical events" (Yin, 1989: 16).

The type of research questions come in the form of who, what, where, how and why. If a "what" type question is involved, as in, "what have been the outcomes of...?," then a survey or the analysis of archival records is in order. Yin sites an example of when there is a need of "investigation of prevalent political

strategies (where a survey or a poll might be the favored strategy) or of the incidence of disease (where an analysis of vital statistics might be the favored strategy)" (Yin, 1989: 18).

"How" and "why" questions are more explanatory and lead to experiments, histories, or case studies. These questions lead to the need to trace operational links over time. You may still rely on a survey as part of the process, but the final analysis still would require a history or case study to be conducted (Yin, 1989: 18). This research asks "how the contractors are incentivized or deincentivized?" and "why are the contracts working or not working in this area?" Looking at the type of questions imposed, it still must be decided on whether to utilize case studies, histories, or experiments. The next question will clarify it further.

Next we must ask "how much control do we have over behavioral events and the degree of focus on contemporary as opposed to historical events?" History is the preferred strategy when we have no access or control over the people or things we are researching. If the event is in the dead past, meaning nobody is alive to testify, then the history strategy would be the preferred method. The case study is preferred when studying contemporary events, but only when the events cannot be manipulated. The same techniques are used as in history, but besides looking at documentation and artifacts, the researcher obtains information through direct observation and systematic interviewing.

Lastly, experiments are conducted when the researcher "can manipulate behavior directly, precisely, and systematically" (Yin, 1989: 20).

This research focuses on the "how" and "why" questions and cannot influence what has already occurred or is occurring. The issue of privatization and the contracts that implemented this concept at Newark AFB, and NAWC have occurred. This researcher has been allowed to interview those involved and to peruse through documentation that relates to the privatization process. It is for these reasons that the case study method is the preferred method for this research.

Definition of a Case Study

Now what is the definition of a case study? Yin quoted a definition from W. Schramm, in a 1971 working paper titled *Notes on case studies of instructional media projects*:

> the essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result. (Yin, 1989: 22-23)

The main part of a case study is to illuminate a decision. In the Newark AFB and NAWC case studies it is all about the decision of how to write the contract, and how the contract is working. Yin provides a technical definition:

> A case study is an empirical inquiry that:
> - investigates a contemporary phenomenon within its real-life context; when

- the boundaries between phenomenon and context are not clearly evident; and in which
- multiple sources of evidence are used.

(Yin, 1989: 23)

Research Design

Since the case study method is to be utilized a case study method a research design must be developed. According to Yin, the case study design consists of "(1) a study's questions; (2) its propositions, if any; (3) its unit(s) of analysis; (4) the logic linking data to the propositions; and (5) the criteria for interpreting the findings" (Yin, 1989: 29). First you must have questions the study is to address. The type of questions helps decide what type of research method to utilize. In this case the research questions are "how are the contractors incentivized or deincentivized?" and "why are the contracts working or not working in this area?" The investigative questions included in chapter 1.

The next is propositions. According to Yin the study does not necessarily have to have propositions, but must have a purpose (Yin, 1989: 30).

The third component is unit of analysis (Yin, 1989: 31). The unit of analysis is the contracts, and the PCOs, ACOs, and ordering officers for each contract.

The fourth component is linking the data to the propositions (Yin, 1989: 33). This will be done by "pattern-matching" and the noting of patterns and themes. This will help see if there is an ideal contract type to incentivize a

contractor in certain situations, compared to what was selected, and find those areas that are a recurring pattern or theme (Miles and Huberman, 1984: 216). Chapter two covered the different contract types and when each type is utilized.

Lastly, there must be some type of criteria for interpreting the findings (Yin, 1989: 35). The findings are then compared to the model to see if there is a difference. If the differences are non-existent or minute then it cannot be said, with any certainty, that there is a difference (Miles and Huberman, 1984: 237).

Validity

There are certain things that can be done in order to obtain validity in case studies. The three types of validity that will be touched upon are construct, internal and external.

In construct validity there are three tactics to improve it. The first is by using multiple sources of evidence (Yin, 1989: 41) (Miles and Huberman, 1984: 234). This study obtained its data from interviews and documentation. Interviews were attempted with all PCOs, ACOs, ordering officers, award fee personnel, and contractors involved with the contracts. The interviews were "focused interviews" (Yin, 1989: 85). These type of interviews are open ended interviews, but will follow a certain set of questions and protocol (Silverman, 1993: 93). The questions are unstructured questions that do not limit the respondent to a limited set of responses, but act as a frame of reference to the respondents (Cooper and Emory, 1995: 299).

The second important part of evidence was documentation. Documentation included the acquisition plans, and contracts from both locations.

Next, a chain of evidence can be established. All evidence obtained, interviews and documentation, were filed to allow a another researcher to review the files and see how the process was done from beginning to end. This allows another researcher to also duplicate the efforts to see if they obtain the same results.

The third way to help achieve construct validity is to have the draft case study reviewed by the participants in the case. In order to achieve this the researcher went over, with the interviewees, all notes taken from the interview. To increase the likelihood of accuracy all interviewees were e-mailed a list of questions to answer before the interview (See Appendix D). Their replies provided the researcher a base of information to formulate other questions to ask the interviewee in person or on the phone.

In internal validity there are three tactics that can be utilized: pattern-matching, explanation-building, and time-series analysis. Pattern-matching, as mentioned earlier, involves comparing the ideal type of contract to what was selected. The other internal validity tactics do not apply.

The last type is external validity. To obtain external validity Yin states that you must use replication and logic in multiple-case studies (Yin, 1989: 41). This study tries to achieve external validity by conducting two case studies and then comparing them.

Reliability

Validity is important, but the case study must also be reliable. In order to obtain reliability the researcher must use case study protocol and develop a case study data base. A case study protocol involves an overview of the case study project, field procedures, case study questions, and a guide for the case study report. The overview of the case study project is the first two chapters of the thesis. This includes the relevant background information about the subject, and relevant readings (Yin, 1989: 72).

The field procedures includes how the data will be collected. The researcher gained access by contacting the DCMCs at each location, and then obtained key managers for the government and contractor who allowed interviews of their key people (ACOs, PCOs, and ordering officers), plus obtained key documents (contracts and acquisition plans). All potential interviewees were told the minimal information necessary to make a decision on whether or not to agree to an interview. In order to give each interviewee the freedom to speak with as little chance of reprisal as possible, each interviewee was given complete confidentiality, therefore the names of those people interviewed were not stated within the pages of this thesis. Upon acceptance of an interview, the interviewees received a list of questions to answer by e-mail. Upon receipt of their answers, additional questions were made and a interview date was made.

The interviews were "focused interviews" (Yin, 1989: 85). These type of interviews are open ended interviews, but will follow a certain set of questions and protocol (Silverman, 1993: 93). A tape recorder was utilized, when done in person, and approved by the interviewee, in order to provide a more accurate rendition of what was said (Yin, 1989: 91). A limitation of this research is the inability to conduct all interviews in person. Due to personnel being located all over the United States it was economically infeasable to conduct all interviews in person. The questions were asked in a non-biased way in order to avoid steering the interviewee toward a certain answer. This was done by only clarifying remarks, or further inquiry on the subject.

Next is case study questions. This was mentioned previously. The investigative questions are not necessarily going to be asked of the interviewee, but will guide the interviewer to make sure all the information needed is obtained (Yin, 1989: 76).

The guide for the case study report involves providing a linear sequence of how the report is written. The thesis format from AFIT provides this linear sequence.

The Obtaining of a Lack of Bias

Two concerns of case studies are that they allow biases to influence the researcher and that they provide little basis for scientific generalization (Yin, 1989: 21). Yin states that biases can enter any strategy where humans are

involved. The goal is to minimize it as much as possible. In experiments, the researcher can bias the results by how she conducts it. In surveys biases can be caused by how the questions are worded.

When trying to generalize from case studies it becomes difficult. Ask yourself the question "how do you generalize from one experiment?" You generalize based on multiple experiments and generalize to theoretical propositions, not to populations or universes. The same is true for case studies. We will generalize to specific theoretical propositions. To do this we need to do multiple-case studies and in this case two case studies will be involved. Obviously, as additional case studies are done on this subject, the generalizations will become more believable.

Due to the nature of this research, with only one interviewer, and the problem of preconceived notions, biases are something that are almost impossible to completely delete. In this study there are two ways that biases were reduced. First, an advisor and reader provided alternative explanations to the findings. Yin states that "If the quest for contrary findings can produce documentable rebuttals, the likelihood of bias will have been reduced" (Yin, 1989: 65). Also, only one person obtained data, which eliminated a chance of bias due to lack of similar knowledge to the "senior" interviewer. In order to have more than one interviewer all interviewers must be "senior" interviewers. In order to obtain this all interviewers must obtain training and preparation, and this still does not guarantee similar knowledge among the interviewers. This is

completely avoided by the utilization of one interviewer (Yin, 1989: 66) (Miles and Huberman, 1984: 36). Also, since the interview allows some open-endness, the interviewee will be allowed to bring up other areas which the questions do not specifically address. This decreases any constraints on the interviewee and reduces biases that questions alone may cause (Silverman, 1993: 96).

Summary

This chapter covers the basis on how the research is going to be conducted and what process will be used to get from having questions to interpreting the results. The importance of the process cannot be overstated. It is a set processes that will allow another researcher to try to duplicate the results. This will also increase validity and reliability. The biases of a researcher are also real. It is hard for humans not to have preconceived notions about a problem they want to study. It is these biases that make it all that important to have a set of procedures to help reduce them. It is the researcher's best intentions to be open minded and follow procedures step by step in order to provide believable and thorough results.

IV. Results and Analysis

Chapter Overview

The research involved interviewing the PCOs, ACOs, ordering officers, award fee personnel, contractors, and other personnel who are or were involved with either of these two contracts. In all, 27 people responded to the interview questions and 22 completed the interview process with a telephone interview. None received a personal interview due to scheduling difficulties.

For the Air Force contract with Boeing twelve people were contacted and ten were interviewed for a 83 percent response rate. For the Navy contract with Hughes 19 people were contacted and 17 responded for a 89 percent response rate. There were two people from each contract who were only able to respond to the e-mail questions and could not finish the interview process with a phone interview.

This chapter will go over the results obtained from the interviews on each investigative questions.

Investigative Question One

How was it determined to utilize an IDIQ with the contract types authorized? How is it determined to use a certain type of contract on

delivery orders? What factors are utilized to make this decision? How do you incentivize the contractor through the use of contract types in the IDIQ?

The first part of investigative question one deals with why it was determined to utilize an IDIQ with the contract types authorized. The Navy contract utilizes the IDIQ to allow a broad statement of work that covers a wide range of taskings, while utilizing individual delivery orders for specific taskings. An argument was on whether to utilize FP-LOE or CPFF on orders. The FP-LOE is the preferred type on delivery orders. The reason given is that the Navy wanted some assurances that costs would be reduced to show that privatizing NAWC-Indianapolis was saving money. By utilizing FP-LOE the contractor bears the risk of agreeing to fixed hourly labor rates, while the government bears the technical risk that the contractor will not produce an end item before the hours are expended. Thus, the Navy does obtain a potential price that may be lower, but in the end may actually pay more if more hours are needed to complete the task.

The use of FP-LOE was determined to be the best contract type for at least the delivery orders which handled the work already in progress at the former NAWC. It was too risky for the contractor to accept a FFP type delivery order when it was hard to tell where in the process the program was. Therefore, a logical "guess" was made utilizing the FP-LOE that would allow the contractor to ask for more hours if the "guess" was wrong.

The CPFF method was included in the IDIQ contract because of the insistence of the contractor, but its use must be approved by the PCO. This was a compromise given during the negotiation process. The PCO believed the cost risk was too high to allow this type to be utilized, but if a user believes the CPFF is warranted then they must convince the PCO. The contractor believes the requirement to obtain approval is what is deterring the use of the CPFF.

In the Boeing contract it was determined to utilize an IDIQ contract due to the variability of the aircraft workload. While the missile workload was a certain percentage every year, and thus known to the missile ordering officer, the aircraft requirement was not known because they really did not know what repairs would be needed and in what quantity.

In deciding what contract types ordering officers would be able to utilize in this contract they looked at FFP, FP-LOE, CPFF, CPIF and requirements contracts.

It was decided to not use FFP because there just was not enough data available to determine a cost within a reasonable amount. There was just too much cost risk to the contractor.

The FP-LOE contract would not break down the costs where they could see what cost what, and the Air Force wanted to have everything segmented.

CPFF was not used because the procurement personnel wanted to incentivize performance.

The CPIF was not used because the government wanted to utilize subjective criteria in their evaluation of the contractor.

The requirements contract was looked into and received some support, but contractors wanted to be guaranteed some minimum amount of money. The requirements contract would have guaranteed the contractor that any requirement, that is stipulated in the contract, would have to go to them, but if the government does not have any requirements during the contract period the contractor would not receive any work. The IDIQ, though giving the contractor a guaranteed minimum, does not require the government to go through them.

Most of the line items in this contract require the use of CPAF, due to poor cost information. The procurement team considered FPAF but industry, plus HQ guidance pushed them towards CPAF. According to one PCO, despite disagreement at the time, looking back, it turned out to be the right decision.

The second part of the investigative question deals with how ordering officers decide which type of contract to utilize, to include the factors involved. The ordering officers for the Navy contract with Hughes decide which contract type to utilize by looking at what the statement of work wants the contractor to provide. Generally for services the ordering officers stated that they utilize the FP-LOE. This includes research and development, support of logistics functions, or testing. The FP-LOE was utilized almost exclusively for the delivery orders for work already in progress at the Navy-run facility. One ordering officer stated that they believed Hughes and the Navy felt uncomfortable with the records and data

maintained by NAWC-Indianapolis. Due to this and the short time frame to privatize NAWC-Indianapolis, there was not enough time to figure out, with much certainty, how much work was left on on-going programs. The cost risk was too great on Hughes, so FP-LOE was utilized. As time goes on the consensus among ordering officers is to try to utilize more FFP, because programs will be started from the beginning and Hughes will be able to utilize their pricing techniques to the fullest.

The ordering officers looked at many factors to determine the contract type. The majority of ordering officers looked at the nature of the requirement, which means that for services they lean towards FP-LOE, but for a task that provides an end product they lean towards FFP. So far, roughly 2% of DOs have utilized the FFP contract. Most ordering officers also looked at the technical package/statement of work (SOW). If the task is for something that is not clear cut then they utilize FP-LOE. This way the contractor only accepts a rate risk while the government accepts the risk that the contractor may not provide an end product in the agreed upon hours. Other factor areas included risk, stability of requirements, and historical data.

In order to determine contract type there are many sources available to the contracting officer. These include the FAR, DFAR, pricing guides, experience, and many other potential sources. Of these, almost 78% of ordering officers stated that they utilize experience and the FAR to determine contract type. Twenty-two percent stated, maybe due to the use of the "Alpha

Acquisition" process, that they utilize the program officer/user to help determine contract type (in some cases there is a contracting specialist working at the program office). Other sources mentioned include DFAR, pricing guides, and other ordering officers.

For the most part the ordering officers for the Air Force contract with Boeing just have to determine which line item to utilize on the contract and that line item will state what contract type to utilize. There are several line items titled "over and beyond" which each allow a different contract type to be utilized and it is these that are subjective. In these cases the factors looked at are the type of effort involved, the data available, and risk.

In determining contract type 60 percent of respondents stated that the FAR and experience played a big part, with only one mention each of other DoD agencies, pricing guides or other applicable regulations.

The third part of this first investigative question involves looking at how the ordering officers and PCOs feel these contract types incentivize contractors, and whether or not they are operating smoothly.?

For the Navy contract there were many opinions of how the contractor was incentivized, but for the FFP type contract almost 100 percent stated in one way or another that the incentive was on cost. Any cost reduction would increase profit, thus provide an incentive. It also incentivized the contractor to complete on time (time is money).

The FP-LOE provided an incentive to the contractor to stay within 7% of the estimated cost which will allow it to invoice for the whole amount. The ordering officers stated they did not see much incentive for the contractor to reduce costs and that the contractor did not have to provide an end product. There were complaints of non-deliveries, but not from problems with their own delivery orders. Their complaints were due to information they heard from another party. There were no complaints from those affected by cost adjustments, though their customers were not happy that they had to provide additional funds. Due to the privatization only being 9 months old, there are a lot of delivery orders which have not come to the point of completion and thus we do not know how many of these will go over the originally estimated amount. In those DOs which took on work in process (WIP) it is important to educate the customers that there is a chance that the estimate could be wrong.

On the CPFF contract one ordering officer stated that the contractor is somewhat incentivized to keep costs within line because the fee does not increase with costs, but it is a small incentive. Most ordering officers and the PCO stated that there is not much of any incentive for the contractor in a CPFF when it comes to cost containment since the contractor is reimbursed for all allowable costs.

In the T&M type contract the only profit is on labor, but there is not an incentive to reduce material costs. The contract pays the contractor for whatever the material costs are.

The ordering officers made one comment that applies to all types of contracts Hughes is working on at HAWC. Fifty percent of ordering officers stated that Hughes' primary incentive in every contract is to obtain additional work in the future. If Hughes does not satisfy their customers, then their customers will find someone else to do the work. Also, in a little more than four years, when the contract expires, customers will no longer just go to HAWC, but will compete their programs. It is this fact that brings about the primary incentive to Hughes to perform and keep their costs down.

Investigative Question Two

As a PCO, what controls do you use to ensure the right type of contract is used? How do you control the process?

The PCO for the Navy contract with Hughes stated that he controls the process by appointing ordering officers who are warranted contracting officers, and who posses required certification levels. The PCO allows the ordering officers to use their own knowledge and training to determine what contract is best for any given task. In order to bring the ordering officers up to speed on this particular contract the PCO held a conference after award to discuss and train the ordering officers on the issuance of delivery orders (DOs). Also, prior to approving the appointment of an ordering officer the PCO discusses key issues and contract types with him or her.

In order to insure everything is going correctly the PCO conducts periodic reviews of delivery orders. Also, the PCO is the only person who can make changes to the basic contract. For the most part the PCO must trust that a trained and experienced ordering officer will make the right decision. If the wrong decision is made the only person that ordering officer will hurt is the customer he or she works with.

The PCOs for the Air Force contract with Boeing also require the ordering officers to be warranted contracting officers, but the ordering officers can only order line items off the contract. These line items already stipulate which contract type must be utilized with it, so there is greater control than with the Navy contract. The PCOs do receive copies of all orders and modifications to these orders, and they spot check them.

Another control is the requirement for the ordering officer to obtain a job control number. This is to make sure the contract maximums are not violated, but this could be utilized to check on other areas of interest if needed. As with the Navy contract, any changes to the basic contract can only be made by the CO.

Due to contracting being a profession, the Air Force and Navy are able to trust the contracting officers to perform their duties without having to install strangling controls. So far, from interviews with the PCOs, they did not indicate that they have had any problems with ordering officers' choice of contract type on delivery orders.

Investigative Question Three

What types of problems are you having with the contract? What could have been done better with the contract?

This investigative question delves into what problems there are with the contract, and indirectly what problems they may be having with the contractor.

With the Navy by far the biggest concern with the contract is with the "Alpha Acquisition" process. A few of the ordering officers believe that the contractor is too involved in the requirements definition of the proposal, and has too much leverage because of it. They also stated they want to be more involved with the program office/user in preparing the proposal. Right now they do not see a proposal till it hits their desk and then the program office/user (there are many) wants them to rubber stamp it. The problem is the program office/user wants a reply within seven days upon receipt of the proposal. Before the "Alpha Acquisition" process delivery orders took up to 30 days to process. This time savings is supposed to occur because of the up front work between the program office/user and contractor. The seven days to process the modification is difficult when the ordering officer sees the package for the first time when it arrives for approval. This is especially difficult when, as one ordering officer stated, the program office/user relies too much on the contractor and does not review the proposal before sending it to the ordering officer.

Another ordering officer stated that the process needs to be better defined because it is open to wide interpretation. Due to this openness the contractor is interpreting the process differently than what some ordering officers believe it should work.

I do not believe this has to be the case though. A former ordering officer, who had processed 120 delivery orders under this contract, stated that he always was involved with the user and contractor in putting together proposals.

Another complaint of the contract is that the taskings are so ill-defined that it is hard to determine a fair and reasonable price. In one case the ordering officer had no idea what the user wanted and therefore he had to send it back to be reworked.

A couple of ordering officers stated that the contract is so broad that they felt that almost anything can be purchased on it. It is hard to tell whether to go with Hughes or compete the requirement, and they wonder if they are complying with CICA (Competition in Contracting Act). This may be due to the type of work HAWC does. It is a manufacturing facility that can make almost anything, and therefore the contract reflects that ability. This contract was written to give the contractor the best chance to build itself up for the day when the contract expires and Hughes then has to compete with the rest of the world for work.

Another issue concerns the use of the FP-LOE contract. The contract states that the preferred contract type is FP-LOE. This does not mean that the ordering officer has to use it, but the contractor brings up this statement when an

ordering officer tries to argue for FFP. There is a reluctance by the contractor to change due to FP-LOE being almost solely utilized. One ordering officer stated that this statement should have been left out of the contract.

A couple of ordering officers stated that they do not like the 30 percent surcharge on subcontractor costs. This increases their customers (program office/user) cost of doing business to above what they paid before. The justification for having this surcharge is to discourage customers from using HAWC as a passthrough (passthrough being where the customer is just using the Hughes contract to get something done that Hughes cannot do in-house, instead of the user going directly to the subcontractor. This could conceivably be looked at as bypassing CICA requirements).

A recommendation for improvement of the contract from the PCO was to have a fixed fee on the FP-LOE rather than a set profit for each labor hour expended. This would increase the incentive to the contractor to finish the work within the original hours stipulated in the delivery order.

A contracting officer complaint concerns the way the contractor prepares its proposals. Hughes utilizes tenths of hours on its labor estimates, which when extended to labor costs creates tenths of a penny. This requires the ordering officer to adjust the numbers for the delivery order to whole pennies, which takes a lot of time and effort.

Almost 50 percent of the respondents were concerned about the needed adjustment the former government employees have to make now that they are

working in the private sector. The former government employees use to tell the user what their requirement was, and as contractor employees that is supposed to stop, but it has not. One comment was that the contractor employees need to understand their new place in private industry. An example of this problem is a case where the ordering officer was contacted by the contractor to inform him that the project office had a requirement and that the ordering officer needed to send his warrant and paperwork into the PCO to become an approved ordering officer under the contract. Another example is an ordering officer who received a proposal directly from the contractor without it going through the user. The ordering officer did not have a requirement from the project office, and thus he did not have any money.

The problem, as stated by a ordering officer, is the contractor employees have informal networks through DoD entities that have taken a long time to create, and the employees are still trying to use them. It may take some time for new formal and informal networks to take effect, and for a new culture to form.

A problem concerning vouchers mentioned by a ACO has been solved, but could be helpful to future FP-LOE contracts. The FP-LOE contracts are billed using a voucher. Originally the voucher was to be submitted to the technical COR (Contracting Officer Representative), who reviews the voucher, sends it to the DCAA (Defense Contract Audit Agency), which then sends it to DFAS (Defense Finance Accounting Service). Unfortunately, the CORs are all over the country and it would be a logistical nightmare to keep track of. The

DCMC provided a solution by having their engineer review the vouchers on site and then contacts each COR to obtain approval. This DCMC solution avoids having to track each voucher. This extra workload on the DCMC is not part of their mission, but shows their willingness to make the process smoother, and actually save them potential problems down the road.

The contractor brought up two things that they would like to see changed on the contract: the first is taking off the requirement for the ordering officer to obtain permission to utilize a CPFF. They believe this requirement is driving users away from this contract type. Lastly, they want a higher guaranteed workload.

For the Air Force contract three respondents mentioned that the problems with the contract stem from a lack of experience of those who participated in its development. One stated that a full field of experienced personnel, from each of the depot's customers, should have had an opportunity to participate in crafting the RFP, evaluate the proposals, and help in deciding who to award to. Due to not being involved, or being involved in a "meaningless" way, the environmental stress screening required by one of the customers was left out of the contract. Another respondent stated that those working on the contract needed more experience in cost reimbursement contracts, developing the Statement of Work (SOW), award fees, major repair contracting, and negotiated procurements.

Some problems with the contract include identification of GFM and GFE. The contract only has a partial list of what GFM and GFE is at the depot. The

government is still trying to identify these items, so they know what is actually in the facility, and thus know what the contractor may order. The contractor must ask for permission to order materials and equipment, because the government will pay for it under the CPFF. Thus, the importance of knowing what you have so you do not order something that is already available on site. Another questions brought up is "Who is required to maintain the equipment?", and "Who has priority for its use?" For instance, if two or more programs need to use the same piece of equipment, who would have priority? The contract is mute on this subject. So far there have not been any conflicts between programs.

Another issue concerns the references in the technical documents. The technical documents reference other documents, which reference others, and so on, until they reference military standards, which are no longer in existence or are obsolete. Also, the respondent stated, that the technical personnel are inconsistent with what technical information is for informational purposes and what must be complied with.

Another comment was that the Statement of Objectives (SOO) should have been done by the government and then have the contractor write the SOW, thus it would shift the burden of clarity to the author (the contractor), and the government would know exactly what the contractor intended to accomplish through the SOW.

In line with the previous statement was a comment that the work requirements are too broad. The authors of the contract assumed too much

knowledge, and that the work would be done exactly as before. The contract should have been written as if the audience did not know anything about the requirement. The respondent continued on to say that if Newark AFB did not exist and the RFP was issued, nobody would understand it. The requirement must be written so people know exactly what to do, because it must be in the contract for it to be enforceable.

A request from one ordering officer was that there should be two contracts instead of one: one contract for the aircraft portion and another for the missile repair requirement, because the aircraft and missile personnel interpret things differently. By utilizing two contracts the aircraft personnel may be able to fully utilize their experience in aircraft depot repair. Right now, the aircraft personnel believe they have no input into the contract.

One POC stated that he recommends that next time they look at having one type of funding by making the contract a depot repair contract rather than utilizing hundreds of line items. This would provide more flexibility. Also he stated that the data requirements need to be tailored to the contract.

Some problems mentioned with the contracts include Boeing going directly back to the ordering officer and the response from the ordering officer going directly back to the contractor. The respondent recommends that the response go through the PCO, so he knows what is going on with the contract.

In the area of utilizing former government employees there was much concern. One comment was that the contractor thought that by hiring existing

employees they could run operations just as before, but the contract imposes specifications, data requirements, and FAR requirements that an organic government entity does not have to deal with.

Another comment on the utilization of former government employees is that they are still tapping into their former networks. They are causing problems by utilizing communication channels and work habits as before privatization. After privatization these communication channels are still being utilized and there may be too much play between them. The contractor employees are doing what the program office says and taking direction from someone other than a government employee who is authorized to do so. Another respondent mentioned that as government employees if they did not meet the schedule they worked something out with the program office/user. Now, if they do not meet the schedule they have violated the contract. They think if nine out of ten end items were delivered then they did well, but this is not meeting the delivery date. Instead of violating an in-house government suspense, they are now violating the terms of the contract.

Investigative Question Four

As a ordering officer, how much contact do you have with the PCOs and ACOs?

For the Navy contract Hughes holds a videoconference bi-weekly with the ordering officers, PCO, and sometimes ACO (ACO is usually involved once a

month), to discuss the status of orders, and processes. It seemed, from the information collected from the ordering officers, that if an ordering officer only had a few delivery orders then they did not know about the videoconference, or just did not participate. The same was true with other communication with the PCO and ACO, for the more delivery orders the ordering officer had ongoing the more contact with the PCO and ACO. For those with four or less DOs the ordering officer rarely talked with the PCO and ACO.

One ordering officer suggested that they would like more contact with the PCO in order to have a consistent interpretation of the contract by ordering officers.

Almost all of the ordering officers mentioned that they cannot make changes to the basic contract, but a few stated they feel comfortable suggesting to the PCO changes to the contract.

For the Air Force contract there does not seem to be a set meeting for the parties involved to get together. The ordering officers who replied all said that they have very little or rarely any contact with the PCOs and ACOs.

One ordering officer did say he sends suggestions for changes by e-mail or mail, and another stated that they like to have more of their input utilized by the PCO.

While the Navy contract is set up to achieve as much communication as possible, the Air Force contract is not promoting communication among the ordering officers and PCOs/ACOs. The Navy success in this area though may

have a lot to do with the proactive involvement by Hughes to make it happen. On the other hand, those ordering officers on the Navy contract who only have a few DOs have a low level of contact.

Investigative Question Five

Ordering officer question: What problems are occurring because of the way the contract was written, or due to the types of contracts authorized?

In the Hughes contract over 50 percent of the ordering officers did not have any problems with the contract, or any suggestions for different contract types.

One ordering officer suggested that too many delivery orders are utilizing FP-LOE contract type and that they need to move forward and utilize FFP and CPAF. These two types will incentivize the contractor more and shift some risk to the contractor. The CPAF contract is not available on this contract but could be added, if agreed to by the contractor.

Another suggestion for improving the contract would be to have a complete inventory of GFE and put in as an attachment to the contract. This should be done before award if possible.

A suggestion for future privatization is to define the IDIQ more. It is too open ended, and could result in the appearance that ordering officers are utilizing the privatization contract to avoid and or circumvent CICA. Other

suggestions included making sure you have a strong commitment from the government and contractor to make it work, and to sustain a business base.

A couple of ordering officers also stated that it may be better to just not do anymore privatizations, because it does not seem to save money and it really depends on bringing additional work on board. Due to the relative newness of privatization at these two locations, it is too early to tell if privatization will fail or succeed.

Sixty-six percent of the ordering officers for the Air Force contract stated that there was not any problems with the way the contract was written, but one ordering officer wished she could make changes to the contract and utilize their own interpretations of the contract. This is why this person wants a separate contract for the aircraft requirement. Also, that the contract could have utilized a not to exceed (NTE) option, which would have allowed the government to negotiate a fixed price prior to exercising the option.

The only recommendation for contract type was for a "C" type contract which would have avoided the requirement to write delivery orders, and commit the money up front under a lump sum amount. This is different from a "D" type contract (IDIQ) where the money is committed on each delivery order, and there is only a minimum requirement to be ordered off of the contract.

One ordering officer had recommendations for the contracts in future privatization efforts. First was to see what happens, because not enough time has elapsed to really see how it works. Second, they are continuously

discovering work that was not covered in the contract, and this is due to government employees not having to keep track of exactly what they do in their jobs. This is compared to contract employees who need to track exactly what they have done, so that the contractor has an idea how much it costs to do a job. Also, because there are mostly CPAF line items, the Air Force is paying for the contractor's costs, thus the Air Force needs to know where the money is being spent.

Also, another lesson learned is that the contractor's complete proposal should be made part of the contract. The contract writing team tried to incorporate parts of it but did not get everything into the contract.

Lastly, a lesson learned from the pre-award is that contracting needs to listen to the technical personnel in both the RFP (Request for Proposal) preparation and source selection, and the cost team needs to pay attention to technical personnel during evaluation of the proposals. A big problem here was that the technical personnel listed the differences in the proposal to what the government estimate showed, but if the hours or costs were not large enough then they were not mentioned in negotiations. This later caused misunderstandings of what was required. For example, if the contractor said it took 5 hours to fix widget X and the government thought it took ten hours, instead of asking the contractor how they came up with five hours, it was ignored because it was not worth much money. Unfortunately, the contractor may not

have understood what it took to repair widget X, and the government may end paying more than they allotted.

Investigative Question Six

As an ACO, how much contact do you have with the PCO and ordering officers?

The ACOs for the Hughes contract were contacted and both stated that they are in daily or constant contact with the ordering officers, with contact with the PCO being less frequent. They are involved in monthly videoconference meetings with the PCO, Hughes, and the ordering officers. Along with these meetings they hold a quarterly meeting at the contractor's facility. They also review DOs prior to issuance, which reduces the amount of modifications needed later.

The ACOs have made suggestions to changes in the contract, to include changes to the vouchering process (as mentioned earlier), and changes to quality requirements.

One ACO from the Air Force contract was available to be interviewed and he stated that they have weekly teleconferences with the procurement office at Hill AFB, participate in quarterly program management reviews, and joint PCO/contractor conference calls. He also stated that the other ACO does have constant contact with the ordering officers for the aircraft workload.

The ACOs contribute by providing input on award fee performance as a member of the award fee board. The ACOs review potential changes to the contract and are tasked to write non-monetary contract modifications. Their involvement in management issues with each individual program depends on how good of a working relationship they have with them.

Investigative Question Seven

As an ACO, what types of problems are occurring from an administrative standpoint of the contract? Are these problems helping or hurting the ability to incentivize the contractor?

The ACOs for the Hughes contract commented about the same areas. The first concerned problems with delivery orders not being properly written. These problems include wrong addresses, wrong shipping directions, and the dollar amounts not adding up. The second problem with the delivery orders concern the labor hours and material cost not being supported. The ordering officers need to provide quotes for material costs, and give justification for labor hours in order to show that the hours and material costs are reasonable. One of the problems causing this is that engineering and pricing, from the program office/user, gets together with the contractor ("Alpha Acquisition" process) and develops the proposal, but the government does not do an independent estimate, which makes the justification that much more difficult.

Both ACOs believe that the contractor will not be incentivized until the ordering officers start utilizing the FP-LOE (only roughly 2% of the orders so far are other than FP-LOE).

As for incentivizing the contractor, the contractor is incentivized to some degree by the award fee. The ACO though believes the award fee plan is poorly written and administered, because there is too much emphasis on cost performance. This not only affects the execution of work requirements, but it is difficult to properly evaluate the contractor's performance without adequate government expertise and resources.

Investigative Question Eight

For Newark AFB award fee decision personnel: Is the award fee incentivizing the contractor? Has there been any improvement from award fee periods?

Three personnel involved with the award fee for the Boeing contract were asked if the award fee was incentivizing the contractor. The first question was whether or not any marked improvement had occurred. If you go over the percentage awarded to the contractor for the first two periods, the percentage went from 91% to 95%. The third period separated the award fee to an aircraft portion and ICBM portion, so the third quarter percentages are not able to show if there were improvements in period three. For period three the ICBM award amount was 95%, but the aircraft portion was 88%. There is too little history to

just look at the percentage and see any significant changes, therefore the comments from award fee personnel become more important. One person stated that the fee is incentivizing the contractor and does see the contractor getting a little better all the time. Another stated that it is incentivizing the contractor because if the contractor receives anything else than an excellent it gets the contractor's attention. Boeing has other ICBM contracts with an award fee, and they are used to receiving 98 - 99% of the award fee. Also, the contractor is improving in certain areas, but a problem is that the contractor has to stay 5% below cost in labor only in order to get an excellent. There is no requirement to save money on material costs.

Two out of three respondents stated that they are happy with the contractor's progress, and see the contractor improving.

One person did state that he was not satisfied with the contractor's progress because the contractor keeps trying to push for reduction in the requirements, in general, it must meet in order to achieve 100 percent of the award fee. The less requirements the contractor must meet the less items the contractor must concentrate on to obtain 100 percent of the award fee.

When asked what could be improved, one person stated that they need to get away from having the contractor underrun his costs by 5% in order to achieve an excellent rating in the cost category. The complaint here is that as soon as the contractor spends 95% it wants to stop working to avoid going over

that point. Due to this cost problem, one suggestion was to change the award fee criteria to emphasize quality more.

Right now the aircraft award fee is in the rewriting stage to change from five evaluation areas to three. The contractor is providing recommendations, some of which are good suggestions, but the contractor really wants to write the whole thing.

Lastly, a comment from one interviewee was that to be effective the contractor must believe its performance is reflected in the award fee it receives. Until trust is developed the award fee will be less than completely successful.

Investigative Question Nine

For contractors: Does the contract incentivize you to perform better, or is your performance not contingent on the type of contract? What have you done to improve quality and processes due to the contract?

The Hughes contract representative stated that the contract stipulates that they must reduce labor rates by 15% over what it would have been if the facility was not privatized. This "incentive" to reduce per hour labor costs forces them to spend a lot of time managing overhead costs, indirect ratios, salary, and benefit mixes at the expense of seeking other approaches to reducing labor content. The labor hour requirement, in the extreme, prefers that a task take 1000 hours of labor at $60 per hour rather than 100 hours at $90 per hour.

Even though the contractor did not have any complaints on the types of contracts allowed on the IDIQ, he mentioned that the CPFF contract really is not available for delivery orders. He stated that program offices/users appear reluctant to seek approval to utilize the CPFF. He stated that CPFF would ensure the customer received a product while limiting contractor risk resulting from someone elses poor design or documentation.

At HAWC the Navy did not utilize an award fee. The contractor stated that they do not want it because it is all up to a subjective decision made by a award fee official. It is tough enough having to forecast earnings and he believes it takes away individual accountability.

The representative from Boeing stated that it is very hard to make a long term commitment in investment capital when the contract is only guaranteed in one year segments.

He stated that the CPAF is an incentive to reduce costs and perform better in order to obtain more profit.

As for contracts, they would like to see, he stated interest in a fixed fee or firm contract funding, so they could better plan manpower requirements and workload scheduling. Right now they are not guaranteed any fee and only receive funding when delivery orders are signed.

In response to the question "Do you feel the award fee is being fairly administered?," he stated that the criteria have changed since the initial award, but it did not include any of Boeing's recommended changes. Thus, the

contractor is dependent on the subjective nature of the award fee criteria, which is different for each customer (aircraft/ICBM).

The Boeing representative stated that the award fee has incentivized them to perform better. The contractor has initiated total quality techniques to better improve processes and systems which will help lower costs.

Investigative Question Ten

Does the requirement to obtain permission to utilize equipment on commercial contracts impede the contractor from obtaining commercial work?

One of the reasons for privatizing NAWC and Newark AFB was to allow them to bring in addition civilian work to augment their military workload. This would increase the utilization of the facilities and thus allow overhead costs to be stretched over more work, which would reduce the government's overall cost for work done at these locations. The following is how both locations are helped or not helped in this area.

At HAWC the contractor must obtain authorization from the PCO to utilize certain government equipment on commercial and other government contracts. The only equipment the contractor must obtain authorization to utilize is program essential equipment. The PCO estimates that the equipment in this category includes roughly 400 to 600 pieces of equipment worth $10 million. This is about 1-2% of the total equipment available. The equipment the contractor can utilize,

without authorization, is worth hundreds of millions of dollars. The reason for the restriction is that the actual programs own this equipment and the users do not want to lose access to it. The program managers were cautious since they were not sure privatization would work and if privatization failed the contractor would be legally able to take the equipment with him. In some cases, due to the specific nature of this equipment, it would be difficult to utilize this equipment except for its original purpose. Hughes, so far, has not needed to use this government furnished equipment (GFE) on other contracts. If that time occurs then Hughes will have to request approval from the PCO and may have to pay for its use. This constraint does not seem to be affecting the contractor due to the relatively small amount of equipment involved and Hughes' ability to utilize its general purpose equipment on any contract. So far Hughes has obtained twenty-eight commercial and other DoD contracts worth over $300,000, but none of them have required the use of program specific equipment. The Hughes representative also stated that he does not believe this requirement will affect their ability to obtain significant additional work.

At Newark AFB Boeing must obtain authorization from the PCO before using certain equipment on commercial and other government contracts. At this time roughly 66 percent of the equipment is in this category. This means that the Air Force still retains ownership of 66 percent of the equipment, and the rest is owned by the Port Authority. As long as government work is not delayed, by allowing work on commercial contracts to utilize the equipment, then the request

will be approved. To determine if there will be any effect, the ACO at Newark AFB discusses the request with the particular program manager involved. The ACO determines how much Boeing should pay to utilize the equipment, and then forwards the request to the PCO for determination. The ACO utilizes the government property regulations to determine use. So far, Boeing has not asked to use any equipment on commercial contracts. As of August 1997 Boeing does not have any commercial contracts, though Boeing is getting their workers FAA certified to handle commercial inertial navigation units. The Boeing representative stated he does not believe this requirement will affect their company's ability to obtain additional work.

V. Conclusion and Recommendations

Chapter Overview

There are two general areas the ten investigative questions covered: contract types, and incentivization. First, we will delve into what types of contracts they could have authorized for the type of requirements at these locations. Next, utilizing Miles and Huberman, we will discuss the patterns and themes that are evident from the interviews.

Contract Types

The ordering officers, on the Hughes contract, utilized the FP-LOE contract on its initial DOs and continue to mainly use the FP-LOE type (98% of all DOs have utilized the FP-LOE). As stated in chapter 2, the FFP-LOE is for work to be done over a stated period of time and where the work can only be stated in general terms or is not clearly defined. This mainly encompasses the area of research and development.

The reason the Navy likes the FP-LOE contract is due to the incentive for the contractor to finish within 7% of the cost estimate (93 - 100%). Though this may be an incentive on paper, there was not any consensus among the PCO, ACOs, or ordering officers that this was an incentive. In fact, most thought that the FP-LOE did not incentivize the contractor that much.

The Navy seriously needs to consider moving toward FFP for those requirements that do not fit the research and development mold, and which they have something that is clearly defined. As stated earlier, FFP would work, but FFP should be utilized for items that are well defined, and that which is mostly utilized for commercial supplies and services. FFP is not typically utilized for research and development. This may be why the contractor does not like FFP, because most of the things being done at HAWC does not fit the FFP mold. For those items that do fit the mold though, FFP should be utilized.

So what about a cost type contract? The CPFF is authorized on the contract, but is it right for the DOs with Hughes? The CPFF does somewhat incentivize the contractor to keep costs down and complete early because of a fixed fee which will be a greater percentage of costs when costs are minimized. The downside is that the contractor could transfer costs from work being conducted on a FFP contract to a CPFF contract. The typical application is for a research study, and a lot of what HAWC does is research and development, prototypes, and manufacturing. Research studies may not be a large portion of their workload, thus the CPFF may not be appropriate to use as the contract of choice.

A type of contract that may be good to utilize is the CPIF. The CPIF will incentivize the contractor to improve performance, such as delivery date and performance benchmarks. This application fits some of what HAWC does, and

that is research and development of a prototype. The cost to administer the CPIF would have to be weighted against the benefits.

For those standards which are subjective, thus objective incentive targets can not be set, then a CPAF contract type should be looked at. Normally, a typical application for this type would be for large scale research studies, but the Air Force utilizes this type almost exclusively in the Boeing contract. So, it just goes to show that there are many ways to incentivize a contractor and yes, there are certain contracts that are recommended for certain programs, but the Air Force and Navy have both shown that there are a lot of gray areas when it comes to which contract type to use.

The Boeing contract mostly utilized the CPAF type contract on its line items. It was decided not to utilize a FFP contract because of the cost uncertainty. Due to the Air Force paying Boeing's allowable costs, under the CPAF line items, the Air Force should have good cost data in which to move toward a fixed type contract. The Air Force could utilize a FFP contract because the requirements are well defined, or will at least solidify during the first year of operation, and the contractor will gain experience. Also, the market is fairly stable, and as the cost information is accrued the cost risk will decrease.

Still it must be determined whether or not the use of a FPAF would incentivize the contractor to perform even better. The award fee seems to be working, but the time has been too short to say for sure. If it is determined that an award fee does work and the cost to administer it is worth the benefits

received, then I recommend the award fee be utilized under a fixed price contract.

A cost type contract should not be utilized for future contracts at Newark AFB. The cost type contract is recommended for research studies, research and development, and emergency repairs (T&M). Now, this is not all inclusive, but the use of these contracts for other purposes should be justified. The use of the CPAF probably was justified by the fact that the Air Force did not have the cost data needed to encourage a company to risk a bid on a fixed price type contract, thus the bids probably would have been to costly (to account for the unknown).

Recommendations for future selection of contract type. In these two privatization efforts one thing has stood out that affected the type of contract selected. Normal contract selection would involve looking at the type of work that needed to be done, but the PCOs were affected by the seemingly poor cost data available from Newark AFB and NAWC-Indianapolis. Without a good estimate on what it cost to do something, the Air Force and Navy could only utilize contract types that put the cost risk on the government.

The Air Force's CPAF line items pay the contractor for all allowable expenses, plus an earned award fee. The Navy basically did the same thing with the FP-LOE contract, but only gives the contractor an estimated amount of hours to complete the job, and the contractor is not obligated to do so, so in a sense it is basically a cost type contract. The only difference is that each labor hour has

profit and overhead added in and the contractor has little incentive to complete the work within the estimated hours. In the long run, though, Hughes has to perform or it may not obtain repeat business.

The FP-LOE, on the Hughes contract, seems to be the contractor's favorite contract type, especially since the CPFF is not being authorized by the PCO. The contractor is utilizing the statement in the contract concerning FP-LOE use, which states that the government contract of choice is the FP-LOE. The PCO may want to issue a clarification on that statement to inform the ordering officers and contractor that the FFP needs to be looked in more closely for future delivery orders and that justification must be provided for utilizing the FP-LOE.

The PCO's idea of having a fixed fee on the FP-LOE is a good one, and should be considered as a modification to the next option, and future contracts. This will give the contractor a little more incentive to finish under or on cost.

A suggestion for the Air Force to utilize two contracts at the depot, one for aircraft and the other for missiles, should be further looked into. This will allow the experience in the aircraft and missile arenas to be utilized more efficiently.

In the era of acquisition reform the Air Force needs to have the contractor prepare the SOW. This is now being done in the Air Force, but was not done in this case. This will allow the contractor to tell us how they will provide us the goods. This will also help in the problems of writing to the wrong audience. If the contractor prepares the SOW, the SOW will be very detailed and hopefully

avoid the problem encountered with the Boeing contract, where the contract was written for an audience that knew what Newark did. Those people who did not know what Newark did were confused.

Comments on both contracts is they were either too broad, or ill-defined. This may have been done on purpose to make sure the contracts were flexible, but this needs to be further researched. The problem may also have occurred due to the short amount of time the acquisition teams had to award the contracts.

"Alpha Acquisition" Process

In theory the "Alpha Acquisition" process is a great idea that is what acquisition reform is all about: better communication, work smarter, and work with industry. In this case the "Alpha Acquisition" process may need to be refined. Some ordering officers believe they are being left out of the planning stages. Therefore, when they get the package it is maybe the first time they know of the requirement. At this stage the user and contractor have already put together the proposal, which includes a recommended contract type. The proposal does not justify why the proposed contract type should be used and the ordering officer only has seven days to look the package over and justify the price as fair and reasonable. This may be why the ACOs are having problems with the DOs. One ordering officer did state the "Alpha Acquisition" procedures are too broad, but this is not necessarily the root of the problem. Utilizing the

broad procedures should allow the ordering officer to tailor how they utilize the process. If they want to be involved in the process they should set up guidelines with their users and the contractor. If the users and contractor do not see a need to work with the ordering officer at the early stages, then maybe the PCO should get involved and provide some guidance to reduce the broad interpretation of the "Alpha Acquisition" process.

Former Government Workers

Both the Air Force and the Navy privatization efforts seem to be experiencing growing pains of former government employees trying to do what they did before privatization. The problems seem to stem from the fact that contractor employees are utilizing the same networks as when they were government employees. If they used to tell or help the user with a requirement, they are still doing so. If there is something they want done, they know who to call, whether it is a government employee or not. Examples include a contractor employee contacted a potential ordering officer to tell him what the process is to get approved as an ordering officer on the Hughes contract, or the case where the contractor provided the ordering officer the DO package without the package going through the program office. A more serious problem is program office/user personnel giving the contractor direction and the contractor proceeding without the contracting officer's approval. This is where a constructive change may occur, and a ratification may have to be processed.

If contractor employees are being accepted by government employees just as before privatization, then why should the former government employees not continue to use their networks as a contractor employee? Hughes and Boeing may even consider this as an asset to their businesses. Therefore, it is up to the DoD (in this case the Air Force and Navy) to inform and train their employees to not treat these former government employees the same and allow them the same access, which may influence the requirements they have. The contractor needs to go through normal channels in order to perform their work. Also, Government personnel, outside those authorized to give direction, should not be giving the contractor direction. In this area, the PCO needs to re-inform the contractor that only the PCO is authorized to give direction (unless the person is specifically authorized by the PCO) and the contractor should reiterate this to their employees. The contractor is under no obligation though to stop its employees from trying to influence the process by utilizing their old networks, because that is business (unless it is fraudulent is some way). The DoD though needs to be aware that this is occurring and provide adequate controls and training to reduce the threat.

Training and Communication

The Navy PCO held a conference, with the ordering officers, after award to discuss the process of issuing delivery orders. They also discuss the key issues of contract types with every ordering officer applicant before appointment.

Despite this training the ACOs are experiencing problems with the delivery orders. To help solve this problem the ACOs are now reviewing the DOs prior to issuance. Additional training may also be needed in order to reduce these administrative mistakes.

The communication, for the Hughes contract, between the ACOs, PCOs, and ordering officers seems to be good. The Navy holds videoconference meetings with the interested parties bi-weekly to discuss the status of orders and processes. The Air Force does not seem to have a set meeting, and some of the ordering officers said that they have little contact with the ACOs and PCOs. This is very subjective, since what the ordering officer may consider little contact may be considered constant contact by the PCOs or ACOs. The problem is with perception. The ordering officers perceive little contact, therefore they believe they need more contact with the PCOs and ACOs. Along with more contact, one ordering officer stated that they would like more input utilized by the PCO. So, there is some anguish in this area. Maybe including the ordering officers in the weekly teleconferences with the PCO and ACO would help them to be more involved in the contract.

Government Furnished Equipment/Government Furnished Materials

GFE seemed to be a problem at both locations. At HAWC the Navy does not have everything accounted for and it is affecting the ordering officers and users who are concerned with what equipment is under whose control. The Air

Force has the same problem at Newark AFB, and has paid the contractor millions of dollars to inventory it. The Air Force is being affected also by the fact that they need to know what is there, so they do not pay for equipment or materials they do not need.

A recommendation was to wait till all GFE/GFM was inventoried prior to award of the privatization contract. This is the best solution to this problem, but the Air Force and Navy were on a tight schedule to get privatization under way. In the future more time needs to be considered to give the organization time to inventory what they have. The DoD should already have inventoried all its equipment, but it seems to be lacking, therefore the DoD should renew this effort, especially in this those areas (depots for instance) where privatization-in-place is a possibility.

Experience

A complaint on the Air Force side is that there were not enough pertinent experienced personnel involved in the development of the contract, and users should be more heavily involved in the preparation stage of the contract. The comments were not further researched, but from comments of "the requirements are to broad," and "poorly written technical documents," a case could be made that more experienced personnel may have made a difference. The Air Force needs to look at what they are trying to accomplish, what contract types they may use, whether negotiations will be involved, and then get the most

experienced personnel involved from those areas. This is important, especially at time when a new DoD concept is being tested, like privatization-in-place. It is important that we give privatization the best possible opportunity to succeed, without cutting off its legs from the start with a poor contract.

Incentivizing the Contractor

For the most part it seems that so far the Air Force is incentivizing the contractor through the CPAF and FPAF. It will be a couple of years before a clear pattern is set. The requirement to obtain approval to utilize GFE on other contracts though could become a problem. The contractor and government personnel do not think it is a problem, but Boeing has not received other contracts to test its theory.

The Navy has managed to transfer 98-99% of the GFE to the City of Indianapolis. In turn, the City transferred the GFE to Hughes. The Air Force needs to see why only 33% of the equipment at Newark AFB has been transferred to the Port Authority, and whether or not more can be transferred. If it is a regulation issue at hand the AF needs to find out how the Navy was able to transfer such an substantial amount of its GFE. The situation at Indianapolis and Newark may be completely different, but this area needs to be readdressed in order to give Boeing the best chance at success.

Recommendations for Future Research

Due to the relatively early stages of both privatization efforts, it is too early to tell if savings will occur. Future research should look into pre-privatization cost data and compare that to post-privatization cost data to see if costs have gone down.

After several years have passed by, another area that research will be needed is to see what changes have occurred in the culture, networks, and controls. All these areas need to be delved into to determine how these areas have changed. This information will help future privatization sites to better prepare themselves for a smoother transition in a private company.

An important part of privatization is the transition of the workers from government to private employment. A reoccurring theme among the interviews was that the former government workers do not understanding the new process. Questions to be asked would include "what training could be conducted before privatization to help with this transition?" Also, "what training could be done to those that will be working with the former government employees?"

Conclusion

The one reason for privatization in place is to transfer a government entity to the private sector. It is with this intent that GFE needs to be transferred over to the public sector.

Another reason to privatize-in-place is to allow the private entity to bring in additional work in order to fully utilize the facility through increasing economies of scale. This is important in order to save money. By increasing the workload the Air Force bears less of the overhead in its contracts with the private entity. This may be more difficult if the contractor does not have the equipment available to do the work. The DoD needs to encourage commercial work as much as possible, for without it the DoD may not save money, and the company may go out of business. The first hurts modernization efforts, while the second hurts future competition.

The military has based some of its cost savings hopes on privatization. The funds for modernization of the armed forces is suppose to come from this effort. Therefore, it is vital that our best efforts go into those areas where privatization may be advantageous. In order to give privatization the best chance of succeeding, it is important to bring into play the most experienced personnel from the using organizations and acquisition world. It is the contract they draw up that will either help privatization to succeed or suffocate it.

In addition to the contract, prior planning must be a priority. This includes preparing the organization to capture the cost of doing business. This needs to be done in order to convince contractors to provide proposals on a fixed type contract. Upon the decision to privatize an organization, the government needs to transition the government employees to the private sector. After privatization, the government employees that interface with the new contractor must be given

training on how they can and can not interact with the former government employees.

The overall intent of this research was to provide information to those now working on the privatizations at Kelly AFB and McClellan AFB, and other privatization efforts, and hopefully help them reduce the level of the bumps they are sure to encounter.

Appendix A: Areas Outsourced

The following is a list of things companies are most commonly outsourcing and what they are looking into outsourcing (The Outsourcing Institute, April 21, 1997: 2-3):

Administration:

- Printing and reprographics
- Mailroom
- Consulting
- Training
- Things businesses are looking to outsource:
  - Records management
  - Administrative information systems
  - Supply (inventory)

Customer Service:

- Field service
- Field service dispatch
- Telephone customer support
- Things businesses are looking to outsource:
  - Customer service information systems

Distribution and Logistics:

- Freight audit
- Consulting
- Training
- Freight brokering
- Leasing
- Things businesses are looking to outsource:
  - Warehousing
  - Distribution
  - Logistics information systems
  - Operations

Finance:

Payroll processing
Purchasing
Transaction processing
General accounting
Things businesses are looking to outsource:
Taxes (preparation of forms)

Human Resources:

Relocation
Workers compensation
Recruiting/staffing
General accounting
Things businesses are looking to outsource:
Consulting
Training
Human resource information systems

Information Technology:

Maintenance/repair
Training
Applications development
Consulting
Reengineering
Mainframe data centers
Things businesses are looking to outsource:
Client/server
Applications development
Maintenance
Networks
Desktop systems
End-user support
Full I/T outsourcing

Marketing and Sales:

Direct mail
Advertising
Telemarketing
Things businesses are looking to outsource:
Reservation and sales operations
Field sales

Real estate and physical plants

- Food and cafeteria services
- Facilities maintenance
- Security
- Things businesses are looking to outsource:
  - Facilities management
  - Facilities information systems

Transportation

- Fleet management
- Fleet operations
- Fleet maintenance
- Things businesses are looking to outsource:
  - None

Appendix B: Assets Privatized by Great Britain

The following are a list of items privatized in Great Britain (Pirie, 1988: 27-31):

British Rail Hotels
English Channel ferry services
The Manpower Services Commission: conducted job advertising and some industrial training.
North Sea oilfields
Government land and buildings
Tractors and trucks (state-run car industry)
Refrigerators (state-owned refrigerator company)
British Airways (state airline - sold off a subsidiary communications company)
Oil stockpiles
Oil and gas exploration licenses
Water authority land
British sugar (sold stock in British Sugar)
British Petroleum (sold stock it held in this company)

Appendix C: Clause H-1 from Hughes Contract

H-1 PROCEDURES FOR DELIVERY ORDERS (SERVICES) (JULY 1990) (NAVAIR 5252.216-9550) (DEVIATION)

(a) Each delivery order shall:

(1) Comply with all paragraphs below;

(2) be issued as a delivery order of DD Form 115 (Order for Supplies or Services/Request for Quotations), or on Standard Form 30 (Amendment of Solicitation/Modification of Contract) in the case of a modification to an order, or other similar documents for ordering activities outside DOD;

(3) be identified by procurement instrument number in accordance with DFARS Part 204.7003;

(4) incorporate the terms and conditions of this contract by reference;

(5) set forth a detailed statement of work which references the sub-task area(s) in Section C and description of the data requirements to be provided;

(6) utilize DD 1423's for the ordering of data requirements (or other comparable agency form for ordering activities outside (DOD) and for the purposes of "Special Distribution--Material Inspection and Receiving Report (MIRR)" Section G language, specify addresses of special distribution recipients for DD 250's;

(7) set forth a delivery order maximum price;

(8) specify the commodities, equipment systems, and/or suppliers to which the Organizational Conflict of Interest provisions apply;

(9) set forth packaging (preservation and packing) and marking requirements for deliverables;

(10) specify any GFE or GFI applicable to that order;

(11) set forth the Government's required delivery or performance date and the place of performance, indicating therein the Contractor's facility to be utilized; and in the event travel is required in the performance of the work ordered, the locations at which such performance is necessary;

(12) set forth the place or places where inspection and acceptance will be made by the Government;

(13) set forth the applicable appropriation and accounting data;

(14) specify security requirements above those specified in the Attached DD 254;

(15) contain travel destinations;

(16) ensure that material and support services acquired under individual delivery orders are consistent with the scope of the effort set forth in Section C and such delivery orders must contain value added services furnished by the contractor. **Any major subcontractor effort which exceeds 75% of the total dollar value of the delivery order must be authorized by the NAVAIR PCO.** If the dollar value of a major subcontractor is anticipated to exceed 75% of the total dollar value of the delivery order, the Contractor will orally provide rationale and other pertinent information supporting this need to the NAVAIR PCO. THE NAVAIR PCO will have three working days to approve or disapprove the issuance of the delivery order.

(17) be signed by the authorized Government representative (Ordering Officer).

(b) Ordering Officers designated by the ordering activity shall be warranted Contracting Officers, and shall be authorized by NAVAIR to issue delivery orders under this contract Ordering Officers and the Contractor may negotiate revisions/modifications to order, but only within the scope of this contract. Ordering Officers have no authority to modify any provision of this basic contract. Any deviation for the terms of the basic contract must be submitted to the Procuring Contracting Officer (PCO) for contractual action. Ordering Officers and the Contractor may enter into mutual no-cost cancellations of orders under this contract and may mutually reduce the scope of orders, but **Terminations for Convenience or Terminations for Default shall be issued by the NAVAIR PCO.**

(c) Under no circumstances shall an order or a modification to an order be issued:

(1) Prior to contract issuance.

(2) If the delivery requirements for services extend beyond 120 days after the expiration of the current contract term. Any delivery order issued for non-severable services whose delivery period will exceed the time period set out in H-1(c)(2) and FAR 52.216-22 for completion of the delivery order shall establish phases for performance which coincide with the limitations set out in H-1(c)(2) and FAR 52.216-22 for the succeeding contract years. The exercise of any phase by the Ordering Officer is contingent upon the availability of funds at the time the phase is exercised. If the Government fails to exercise an option year, no phase may be exercised for which the period of performance will extend beyond the limitations contained in H-1(c)(2) and FAR 52.216-22. The delivery order shall clearly establish the labor rates for any phase which may be exercised by the Ordering Officer. The labor rates for any performance period which falls outside the contract term shall not exceed the rates established in the contract for any corresponding option year.

(3) If the delivery requirements for supply type delivery orders extend beyond 31 December 2002. Any Delivery Order for hardware or supplies under this contract whose performance period extends beyond the contract's effective term shall clearly set out the labor rates for the performance period which extends beyond the contract term.

The labor rates for any performance period which falls outside the contract term shall not exceed the rates established in the contract for any corresponding option year whether or not the corresponding option year is exercised by the Navy.

(4) When the order requires access to classified material beyond the requirements of the DD-254 contained herein as Attachment 4.

(d) The total delivery order dollars may not be exceeded in pursuit of the technical objective unless a modification to the delivery order is issued by the Ordering Officer.

(e) Delivery Orders under this contract may be issued via any of the following pricing arrangements: Time and Material (T&M); Cost-Plus-Fixed-Fee; Fixed Price Level-of -Effort (FP-LOE); or Firm Fixed Price (FFP). **Cost-Plus-Fixed-Fee orders shall be approved by the NAVAIR Contracting Officer prior to issuance.** The recommended timeframe should be stated in paragraph (f), Step 3.

(1) Fixed-Price Level-of Effort Delivery Orders shall be placed in accordance with H-2, "Fixed Price Level of Efforts Delivery Orders".

(2) Time and Material (T&M) Delivery Orders shall be priced in accordance with the rates in Schedule B to establish a ceiling price. The rates in Schedule B are fully loaded to include all indirect rates plus profit. At the time the order is placed, these rates together with material and Other Direct Costs, shall be used to establish a ceiling amount for the order.

(3) Cost Plus Fixed Fee Delivery Orders shall be priced in accordance with the rates contained in Schedule B for the purpose of estimating a dollar ceiling. The rates in Schedule B are loaded to include all indirect rates plus fee of 7%. At the time the total cost of the order is developed, the fee of 7% must be backed out of the fully loaded labor rate per hour. This can be done by dividing the total cost of labor (hours multiplied by the fully loaded rate for each labor category) by 1.07. When the total cost of the order is developed, the material and Other Direct Costs will be estimated and applicable burdens plus a fixed fee of 7% applied.

The total contract fee shall be paid upon completion of the contract and upon final acceptance by the Contracting Officer. However, each

billing period the Contractor may submit a fee voucher in an amount representing the percent, computed in accordance with the formula set forth below, of the allowable cost payable under the contract, less amounts previously paid for fee.

BILLING FEE RATE = FIXED-FEE SPECIFIED IN THE ORDER / TOTAL ESTIMATED COST

Payment of said vouchers for see shall be subject to the provisions of the clause entitled "Fixed-Fee" as contained in this contract. **In no event shall a cost plus percentage of cost delivery order be allowed.**

(4) A Firm Fixed Price Delivery Order provides for a price that is not subject to any adjustment of the basis of the contractor's cost experience in performing the Delivery Order. Firm Fixed Priced Delivery Orders shall be priced in accordance with the rate schedule contained in Schedule B. The rates in Schedule B are loaded to include all indirect rates and profit. At the time the order is placed, these rates shall be used to establish the price or the order. Material and Other Direct Costs will be estimated and applicable burdens plus a profit percentage of 12% applied. Material, hours, and other direct costs are to be negotiated prior to issuance of a delivery order.

(5) Other Direct Costs (ODC's) for T&M, FFP-LOE and CPFF Delivery Orders:

(A) Other Direct Costs (ODC's) including material necessary for performance for each delivery order will be specified in individual delivery orders and shall be reimbursed in accordance with the "Payment" clause of this contract. Any material remaining after the completion of the delivery order, the cost of which has been reimbursed by the Government will remain Government property and disposition instructions must be sought from the Administrative Contracting Officer (ACO).

(B) Contractor shall be reimbursed for travel costs in accordance with the Federal Acquisition Regulation as limited by the Joint Travel Regulations, Volume II and the following: (1) Where official company travel can reasonably be planned in advance so as to take advantage of available discounted standard or coach airfares; and (2) Travel to and from work, shall not be reimbursed hereunder.

(C) Any overtime associated with a delivery order will be subject to FAR Part 22.103 and FAR Clause 52.222-2 "Payment for Overtime Premiums". Approval of the use of overtime may be granted by an agency approving official, after determining in writing that overtime is necessary. . ." For

Navy customers, the Chief of the Contracting Organization is the approval authority.

(f) Delivery Orders placed under this IDIQ Contract will utilize the following Alpha Acquisition process and as shown in Attachment 1 to the contract:

Step 1 - The customer identifies a need. Since customers working many different ways, the need may be identified through a telephone call and be simple, or as complex as a complete specification or statement of work. The customer can freely call a Hughes representative(s) (to be specified by separate Hughes correspondence after contract award) and request Hughes' assistance in preparing a proposal and statement of work. This request does not make a commitment on the part of either Hughes or the customer. The request is an invitation to Hughes to work on a possible delivery order on the IDIQ contract.

Step 2 - After the customer has defined their requirements, Hughes and the Customer will work together to draft the delivery order, to include the Statement of Work, Delivery Order type, and price in accordance with the applicable rates set froth in Section B of the contract, and generate a proposal. This step is meant to be collaborative with both parties participating. In some cases, the Customer may already have a well defined statement of work. In other cases, Hughes may be called upon to produce a draft statement of work. This process should result in a completely filled out Delivery Order Package that includes the appropriate items listed in Section H-1(a) above. This step could take a few hours, or several weeks.

Step 3 - After Hughes and the Customer have mutually developed the statement of work and have filled out the delivery order, they communicate with and submit their draft to the Ordering Officer for concurrence.

Step 4 - The Ordering Officer will review the Statement of Work and Delivery Order package for adherence to regulations and terms and conditions of the contract. The Ordering Officer also completes any regulatory items necessary prior to placing the Delivery Order, and together with Hughes and the Customer, negotiates labor hours, Organizational Conflict of Interest issues, delivery order type, security issues, etc. Depending on the size of the Delivery Order, this could take from a few hours to a couple weeks. **Any disagreement between the Contractor and the Ordering Officer shall be referred to the NAVAIR Contracting Officer for a decision.**

Step 5 - All of the parties involved take a last look at the Statement of Work and the Delivery Order package. The package is reviewed

and refined as necessary to implement any changes. This could be a one hour meeting or could be done via E-Mail.

Step 6 - The Ordering Officer formally places the delivery order on the contract. This step is expected to take place in 24 hours or less.

Step 7 - The Ordering Officer will FAX a copy of the Delivery Order to the contractor and to the requiring agency within 24 hours of signature. A copy of the delivery order shall be sent to the ACO, NAVAIR PCO, and payment office specified in Section G (or on individual delivery orders for non-DOD agencies) of this contract plus any additional distribution instructions contained in the delivery order.

(g)Pricing Supply Type Delivery Orders - Pricing for supply type delivery orders for which the period of performance carries over more than one term of the contract (i.e. base year plus option year one or any other combination of time periods for which the contract is effective) will be accomplished by the following process:

Step 1 - Labor - Select the labor categories and multiply the appropriate labor rates in Section B for the year in which the labor is scheduled to be performed. The result will be the total proposed labor price for the delivery order.

Step 2 - Material & ODC's - Added to Step 1 above will be the proposed ODC, material, material burden and G&A and the appropriate fee/profit rate for the type of delivery order selected. NOTE. **Profit on material and ODC's will not be added for T&M type delivery orders.**

Step 3 - Total Price - The sum of Steps 1 and 2 above will be the total proposed price of the delivery order. NOTE. For firm-fixed-price orders, this amount will be the proposed firm-fixed-price of the delivery order.

(h) The cognizant Ordering Activities designated in Attachment 6 are authorized to place delivery orders under this contract. Ordering activities may be authorized to use this contract by contacting the NAVAIR Contracting Officer. Authorization will be granted by a letter signed by the NAVAIR Contracting Officer, pending modification to the contract. Serial numbers specifying the first and second position for the Ordering Activity for placement of the delivery orders will be as specified in Attachment 6.

(i) Contracting Officer Representatives specified in individual delivery orders shall be nominated and appointed by the Ordering Activity.

(j) Since the T&M, CPFF, FFP-LOE and FFP labor rates contained in Section B have been previously covered by a Certificate of Current Cost or Pricing Data and have been set forth in this contract, no separate certification of these rates is required for each delivery order. A new Certificate of Current Cost or Pricing Data will be required upon a change to or a revision of these rates. A Certificate of Current Cost or Pricing Data is required only for Material, Direct Labor Hours (under a FFP type order), and Other Direct Costs and only if the Material, Direct Labor Hours (under a FFP type order) and Other Direct Costs exceed the dollar threshold contained in FAR 15.804-2.

(k) Ordering Officers shall require the contractor to submit a make-or-buy plan in accordance with FAR 15.7 for individual delivery orders when the conditions contained in FAR 15.703 are met.

(l) A Delivery Order may not include any costs for material which the contractor anticipates will be obtained through the MILSTRIP process in accordance with Clause H-4, Government Property. Should the Government decide not to furnish this material, the Delivery Order price will require an equitable adjustment for the procurement of the material by the contractor.

Appendix D: Interview Questions

Questions coincide with the investigative questions in chapter 3. For example: question 1A would help answer investigative question One.

Procuring Contracting Officer (PCO) Questions

1A. How was it determined to utilize an IDIQ contract with the contract types authorized (FP-LOE, FPAF, CPAF, etc.)?

1A(1). What other contract types were looked at and why were they not utilized?

1a(2). Did you encounter any problems deciding on the contract type? What were these problem factors?

1a(3). Any other information you would like to provide concerning contract selection that is not specifically asked for here?

1B. How is it determined to use a certain type of contract on delivery orders?

1B(1). What factors are utilized to make this decision?

1B(1)(a). What sources do you utilize (FAR, experience, pricing guides)?

1C. How do you incentivize the contractor through the use of contract types in the IDIQ?

1C(1). Have these incentives worked?

1D. Does the requirement to obtain permission to utilize equipment on commercial contracts impede the contractor from obtaining commercial work?

1D(1). What is/was the basis for this requirement?

1D(2). Is this requirement needed?

2A. What controls do you use to ensure the ordering officers utilize the correct contract type?

2A(1). How do you control the process?

3A. What types of problems are you having with the contract?

3A(1). Procedural?

3A(2). Interpretational?

3B. What could have been done better with the contract?

10A. Is there any other information not specifically addressed here that you would like to state, or talk about during the telephone or personal interview session?

Administrative Contracting Officer (ACO) Questions

1D. Does the requirement to obtain permission to utilize equipment on commercial contracts impede the contractor from obtaining commercial work?

1D(1). What is the basis for this requirement?

1D(2). Is this requirement needed?

2A. Do you have any control over what contract type is utilized? If so, what controls do you utilize?

3A. What types of problems are you having with the contract?

3A(1). Procedural?

3A(2). Interpretational?

3B. What could have been done better with the contract?

3C. What problems are you having with the contractor?

3C(1). Can any problems be solved by changes in the contract?

3C(1)a. Could the contract have been written differently?

6A. How much contact do you have with the PCO and ordering officers? (for example, by telephone, meetings, etc.).

6A(1). What types of contributions are you allowed to make, and have made. (for example: to changes in the contract, changes to procedures, etc.).

7A. What types of problems are occurring from an administrative standpoint of the contract?

7B. Is the contractor being incentivized by the contract types? In what way?

10A. Is there any other information not specifically addressed here that you would like to state, or talk about during the telephone or personal interview session?

Ordering Officer Questions

1B. How is it determined to use a certain type of contract on delivery orders?

1B(1). What factors are utilized to make this decision?

1B(1)(a). What sources do you utilize (FAR, experience, pricing guides)?

1C. How do you incentivize the contractor through the use of contract types in the IDIQ?

1C(1). Have these incentives worked?

3A. What types of problems are you having with the contract?

3A(1). Procedural?

3A(2). Interpretation?

3B. What could have been done better with the contract?

3C. What problems are you having with the contractor?

3C(1). Can any problems be solved by changes in the contract?

3C(1)a. Could the contract have been written differently?

4A. How much contact do you have with the ACOs and PCOs? (for example, by telephone, meetings, etc.).

4A(1). What types of contributions are you allowed to make, and have made. (for example: to changes in the contract, changes to procedures, etc.).

5A. What problems are occurring because of the way the contract was written, or due to the types of contracts authorized?

5A(1). Are there other contract types that you would have liked authorized in this contract? If so, why?

5A(2). From your experience, do you have any recommendations for future privatization contracts.

10A. Is there any other information not specifically addressed here that you would like to state, or talk about during the telephone or personal interview session?

Award Fee Determination Official Questions

8A. Is the award fee incentivizing the contractor?

8A(1). Has there been any marked improvement over the award fee periods?

8A(2). Is the government satisfied with the contractors progress in this area.

8A(3). Does the contractor seem satisfied with the award fee system?

8A(4). Is there anything that could be improved in the award fee process?

10A. Is there any other information not specifically addressed here that you would like to state, or talk about during the telephone or personal interview session?

Contractor Personnel Questions

1D. Does the requirement to obtain permission to utilize equipment on commercial contracts impede you from obtaining commercial work?

3B. What could have been done better with the contract?

9A. Does the contract incentivize you to perform better?

> 9A(1). Are there any contract types, on this contract, which you don't like? If so, why?
>
> 9A(2). Are there other contract types you would have liked to see authorized on the contract? If so, why?

9B. Do you feel the award fee is being fairly administered? If your contract does not have an award fee go to question 9C.

> 9B(1). Does the award fee incentivize your company to perform even better?
>
> 9B(2). What programs have been started to improve performance, quality, service, etc. due to the award fee? After completing answer, continue to question 10A.

9C. Do you feel an award fee would incentivize your company to perform even better? If so, why?

10A. Is there any other information not specifically addressed here that you would like to state, or talk about during the telephone or personal interview session?

Port Authority/City Oversight Questions

1D. Does the requirement to obtain permission to utilize equipment on commercial contracts impede the contractor from obtaining commercial work?

3B. What could have been done better with the contract?

10A. Is there any other information not specifically addressed here that you would like to state, or talk about during the telephone or personal interview session?

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Vita

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He received an assignment to Lackland AFB, where he implemented the International Merchant Purchase Authorization Card (IMPAC) for the base. He also served as deputy of the Construction Flight, where he was a contracting officer with a million dollar warrant.

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13. ABSTRACT (*Maximum 200 Words*)

This thesis studies the contract types and incentives involved in the privatization of Newark AFB and the Naval Air Warfare Center-Indianapolis. Newark AFB was slated to close by the Base Realignment and Closure Commission (BRAC) in 1993. The Air Force decided to utilize an Indefinite Delivery Indefinite Quantity (IDIQ) contract, and utilize an award fee to incentivize the contractor. In 1995, the BRAC commission decided to close the Naval Air Warfare Center-Indianapolis. The Navy also decided to utilize an IDIQ contract and has mostly utilized the Fixed Price Level-of-Effort contract to obtain its requirements.

Through interviews and a study of contract types, the contracts are analyzed to determine if the contract types are appropriate for what the Air Force and Navy are trying to accomplish. Through this effort possible areas of improvement are found that may help in future privatization efforts, to include the Kelly AFB and McClellan AFB depots.

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The purpose of this questionnaire is to determine the potential for current and future applications of AFIT thesis research. **Please return completed questionnaire** to: AIR FORCE INSTITUTE OF TECHNOLOGY/LAC, 2950 P STREET, WRIGHT-PATTERSON AFB OH 45433-7765. Your response is **important.** Thank you.

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3. **Please estimate** what this research would have cost in terms of manpower and dollars if it had been accomplished under contract or if it had been done in-house.

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a. Highly Significant b. Significant c. Slightly Significant d. Of No Significance

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