U.S. Air Force May Be Paying Too Much for F117 Engine Sustainment
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Objective

The objective of the audit was to determine whether U.S. Air Force (AF) officials used cost-effective measures to sustain the F117 engine. This report is the first in a series that will address this objective. For this report, we focused on evaluating whether the AF’s commerciality determination for F117 engine fleet management program (sustainment) services provided by Pratt and Whitney was supported. A commerciality determination is critical because it affects the type of cost or pricing information needed to support contract negotiations and develop the Government’s negotiation position. Pratt and Whitney F117 engines power the C-17 aircraft.

Finding

AF contracting officers did not support their determinations that the sustainment services for the F117 engine obtained through the GISP contract were, in fact, commercial services. The AF acquired the sustainment services as sole-source, commercial services. However, the AF contracting officers did not assess whether a commercial market existed for those services. This occurred because the contracting officers accepted Boeing’s and Pratt and Whitney’s commerciality claims and AF engineers’ opinions on commerciality without evaluating the research and rationale used to conclude that the sustainment services met the Federal Acquisition Regulation commercial item definition.

In commercial, sole-source situations, suppliers may exploit the lack of competitive markets and demand unreasonable prices. In this case, Pratt and Whitney increased its negotiation leverage by refusing to provide critical information that the AF needed to evaluate the prices for the F117 engine sustainment services labeled as commercial. Without that information, the AF does not know whether the $1.54 billion already spent on the GISP contract through October 2014 for F117 engine sustainment services or if the estimated billions of dollars it intends to spend over the next 7 years is a fair and reasonable price.

Recommendations

We recommend that the Assistant Secretary of the Air Force (Acquisition) require the contracting officer to obtain the necessary documentation to support the commerciality of the F117 engine sustainment service to be acquired in the FY 2015 through FY 2017 GISP contract option and any future contracts. If adequate support is not obtained, the contracting officer should deem the service noncommercial. The contracting officer should also report Pratt and Whitney’s refusal to provide requested information. We also recommend that the Assistant Secretary prepare a written plan that allows for the development of a competitive market for F117 engine sustainment.

We recommend that the Director, Defense Pricing establish policy for oversight of future AF contracts or subcontracts with Pratt and Whitney and establish policy to instruct contracting officials as to what circumstances a contractor’s modified invoices would be acceptable as support for determining commerciality or fair and reasonable prices. The Director should not allow the AF to contract with Pratt and Whitney for F117 engine sustainment services unless Pratt and Whitney provides the necessary information to support commerciality or fair and reasonable price determinations. We recommend that the Director, Contracting Directorate, Air Force Life Cycle Management Center, perform a quality review of Air Force Life Cycle Management Center contracting officials’ compliance with the specified regulations for commerciality determinations and consider corrective actions as appropriate.
Results in Brief

U.S. Air Force May Be Paying Too Much for F117 Engine Sustainment

Management Comments and Our Response

The Director, Defense Pricing and the Principal Deputy, Office of the Assistant Secretary of the Air Force (Acquisition & Logistics), responding for the Assistant Secretary of the Air Force (Acquisition) and the Director, Contracting Directorate, Air Force Life Cycle Management Center, addressed all specifics of the recommendations, and no further comments are required.
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MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)

SUBJECT: U.S. Air Force May Be Paying Too Much for F117 Engine Sustainment
(DODIG-2015-058)

(FOUO) We are providing this report for your information and use. The U.S. Air Force has spent billions of dollars on sustainment services for the F117 engine without obtaining sufficient market, sales, or cost data for these services. Without that data, the U.S. Air Force does not know whether the $1.54 billion already spent on the Globemaster III Integrated Sustainment Program contract through October 2014 for F117 engine sustainment services or if the estimated $3.76 billion it intends to spend over the next 7 years is a fair and reasonable price. We conducted this audit in accordance with generally accepted government auditing standards.

We considered management comments on a draft of this report when preparing the final report. Comments from the Director, Defense Pricing and the Principal Deputy, Office of the Assistant Secretary of the Air Force (Acquisition & Logistics), responding for the Assistant Secretary of the Air Force (Acquisition) and the Director, Contracting Directorate, Air Force Life Cycle Management Center, conformed to the requirements of DoD Directive 7650.3; therefore, we do not require additional comments.

We appreciate the courtesies extended to the staff. Please direct questions to me at (703) 604-9077.

Jacqueline L. Wicecarver
Assistant Inspector General
Acquisition, Parts, and Inventory
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Introduction

Objective

The objective of the audit was to determine whether U.S. Air Force (AF) officials used cost-effective measures to sustain the F117 engine. This report is the first in a series and will address the AF commerciality determinations of the F117 engine fleet management program (sustainment) services. Federal statute established the preference for acquiring commercial items and services. A commerciality determination is critical because it affects the type of cost or pricing information the contracting officer needs to support contract negotiations and develop the Government's negotiating position. See Appendix A for discussion of the scope and methodology and prior coverage related to the audit objective.

Background

The AF acquired F117 engine support from Boeing as part of its C-17 Globemaster III (C-17) aircraft sustainment since the delivery of the first aircraft in 1993. Boeing subcontracted the sustainment of the F117 engine to Pratt and Whitney.¹

C-17 Aircraft and the F117 Engine

The C-17 is a heavy-lift aircraft that transports personnel, vehicles, equipment, and other supplies in its large cargo bay, and it can take off and land on short and rough runways. The AF uses the C-17 to support combat missions and humanitarian efforts. Boeing manufactured the C-17 aircraft and delivered the first aircraft to the AF in 1993 and the last in September 2014. According to an AF official, the AF has 222 C-17 aircraft in its fleet.

The C-17 aircraft is powered by four Pratt and Whitney F117-PW-100 (F117) engines. According to the AF, there are more than 1,000 F117 engines in the engine fleet. Figure 1 shows a C-17 aircraft with four F117 engines installed.

¹ Pratt and Whitney is a United Technologies Corporation company that designs, manufactures, and services aircraft engines. Pratt and Whitney Military Engines, a component of Pratt and Whitney, manufactures the F117 engine, as well as engines that power other U.S. military aircraft. Pratt and Whitney also manufactures commercial engines for commercial passenger aircraft.
The Air Force Life Cycle Management Center (AFLCMC), C-17 Division, is the office responsible for C-17 program management, which includes F117 engine sustainment. The Robins Sustainment Contracting Branch, located at Robins Air Force Base (AFB), Georgia, awarded the contract for C-17 aircraft sustainment.

**Globemaster III Integrated Sustainment Program Contract**

On October 1, 2011, the contracting officer awarded the Globemaster III Integrated Sustainment Program (GISP) contract to Boeing. The GISP contract is a 10-year, sole-source contract that provides sustainment and logistical support for the entire C-17 fleet at an estimated $11.75 billion. According to C-17 Division officials, the AF has spent a total of $4.24 billion on the GISP contract through October 2014.

(FOUO) The AF acquired sustainment services for the F117 engine in the GISP contract for a base period of 3 years from FY 2012 through FY 2014. Boeing subcontracted the F117 engine sustainment services portion of the GISP contract to Pratt and Whitney. Of the total $4.24 billion spent on the GISP contract, the AF reported that it has spent $1.54 billion on sustainment services for the F117 engine. Based on current F117 engine sustainment spending, the AF plans to spend an additional estimated $3.76 billion on those sustainment services from

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2 Contract FA8526-12-D-0001 is commonly referred to as the GISP contract.

3 Contracts can be awarded on a “sole-source” basis when only one responsible source is identified that could satisfy the contract requirement.

4 (FOUO) The additional estimated $3.76 billion to be spent on F117 engine sustainment services may increase or decrease because of future contract negotiations or changes in actual AF flying hours and engine cycles.
(FOUO) FY 2015 through FY 2021. The F117 engine sustainment services acquired through the GISP contract included the receipt, handling, transport, inspection, testing, repair, and overhaul of F117 engines in the fleet, as well as material management, program management, maintaining technical documentation, and updating Government data systems.

The current lead GISP contracting officer\(^5\) modified the GISP contract in October 2014, extending F117 engine sustainment services through March 2015 until negotiations can be completed for the FY 2015 through FY 2017 GISP contract option. However, AF officials from Tinker AFB, Oklahoma, are also considering awarding a separate contract directly to Pratt and Whitney for F117 engine sustainment services.

**Commercial Acquisitions**

The AF acquired sustainment services for the F117 engine as commercial services under the GISP contract. Acquiring commercial services, as opposed to services developed exclusively for Government purposes, has been preferred in DoD since the 1990s. The Federal Acquisition Regulation (FAR)\(^6\) requires commercial products and services to be used to the maximum extent in fulfilling the Government’s requirements. According to the FAR 2.101, “Definitions,” commercial items include any item of a type customarily used by the general public for purposes other than governmental purposes that has been sold, leased, or licensed. The item could also be offered for sale, lease, or license to the general public. The FAR commercial item definition also includes any item that has evolved from a commercial item, through technological or performance advances, even if it is not yet available in the commercial market, as long as it will be available in time to satisfy the Government’s requirements. Additionally, the FAR includes multiple types of services that could be considered commercial. A service is considered commercial when it is provided in support of commercial items as previously defined. A service is also considered commercial when it is “of a type” offered and sold competitively in substantial quantities in the commercial market on the basis of established catalog or market prices for specific tasks performed under standard commercial terms and conditions.

Purchasing services in the commercial market requires the Government to adopt business practices that are common in the commercial sector to determine fair and reasonable pricing, such as the use of commercial price analysis as opposed to cost analysis. Additionally, for a commercial service, DoD assumes that the

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5. The lead contracting officer who plans to award the GISP contract option took over responsibility for the GISP contract in September 2012.

6. FAR Subpart 12.1, “Acquisition of Commercial Items – General,” contains this requirement.
supply and demand of the market will yield more favorable pricing than when a specialty service is acquired. The decision as to whether a commercial service can fulfill agency requirements is based on market research and an analysis of the market. Market research is the process of gathering and analyzing data on product characteristics, suppliers’ capabilities, and the business practices surrounding them. An understanding of the market is necessary to evaluate factors that influence market pricing. Market research can provide information on past prices paid, changes in the product or market, the number of buyers and sellers in the market, and supply and demand trends. Pricing challenges exist for sole-source acquisitions when there is only one seller. In those situations, the evaluation of multiple buyers’ purchases would be beneficial to establish price reasonableness. Cost data may also be needed to determine a fair and reasonable price if previous sales data are not sufficient.

**Review of Internal Controls**

DoD Instruction 5010.40, “Managers’ Internal Control Program Procedures,” May 30, 2013, requires DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls. We identified an internal control weakness in the AF’s process used to determine whether the sustainment services for the F117 engine were commercial. We will provide a copy of the report to the senior official responsible for internal controls in the AF.
Finding

F117 Engine Sustainment Costs Unknown

AF contracting officers did not support their determinations that the sustainment services for the F117 engine obtained through the GISP contract were, in fact, commercial services. Historically, the AF has acquired the sustainment services for the F117 engine as sole-source, commercial services. However, for the GISP contract, the AF contracting officers determined that those services were commercial without assessing whether a commercial market existed. This occurred because the contracting officers accepted Boeing’s and Pratt and Whitney’s commerciality claims and AF engineers’ opinions on commerciality without evaluating the research and rationale used to conclude that the sustainment services met the FAR commercial item definition.

(FOUO) In commercial, sole-source situations, suppliers may exploit the lack of competitive markets and demand unreasonable prices. In this case, Pratt and Whitney increased its negotiation leverage by refusing to provide critical information that the AF needed to evaluate the prices for the F117 engine sustainment services labeled as commercial. Without that information, AF contracting officials could not develop an effective bargaining position. The AF will not know whether the estimated $3.76 billion that will be spent over the next 7 years on the GISP contract for F117 engine sustainment services is a fair and reasonable price without adequate insight into the composition of the customer base or sales related to Pratt and Whitney’s engine sustainment services. The AF can expect to spend billions of dollars on F117 engine support for the duration of the C-17 aircraft’s useful life and should ensure it is getting the best value for the taxpayer.

Commercial Market for F117 Engine Sustainment Services Unknown

The AF contracting officers involved with the negotiation of the base and FY 2015 through FY 2017 option contracts did not support that the sustainment services obtained for the F117 engine were commercial services. The contracting officers determined that the sustainment services for the F117 engine were commercial without assessing whether a commercial market existed as required by Federal and DoD acquisition regulations and guidance.

The Defense FAR Supplement (DFARS) Procedures, Guidance, and Information (PGI) 212.1, “Acquisition of Commercial Items – General,” requires contracting
officers to ensure the contract files fully and adequately document the market research and rationale supporting their conclusion that the commercial item definition contained in FAR 2.101 has been satisfied. DFARS\(^7\) further states that the contractors have a responsibility in determining whether their subcontractors are supplying commercial services. It is important for contracting officers to know the composition of the commercial market, including the buyers and sellers, to appropriately determine whether an item or service is commercial. DoD commercial item guidance\(^8\) further explains that a thorough understanding of the market is necessary for evaluating factors that influence pricing. It also states that while historical acquisition information is useful to provide a description of what happened in the past, contracting officers should consider how changes in the market might have affected the current acquisition environment. It is imperative that Government acquisition personnel use flexibility and exercise sound business judgment in their interpretations and application of policies and procedures.

Historically, the AF has considered the F117 engine and its sustainment services to be commercial and has acquired those services on a sole-source basis. However, the contracting officers involved in the GISP base and FY 2015 through FY 2017 option contract negotiations did not obtain sufficient information to validate that Pratt and Whitney had commercial customers for its F117 engine sustainment services. As a result, the contracting officers did not know whether Pratt and Whitney was selling those services to its commercial customers under similar terms and conditions to those being procured for the F117 engines. AFLCMC should perform a quality review of the contracting officers’ compliance with FAR and DFARS for commerciality determinations and, based on that review, consider corrective actions as appropriate.

**Commerciality Claims Accepted With Limited Information**

The contracting officers accepted Boeing’s and Pratt and Whitney’s commerciality claims and AF engineers’ opinions on the commercial nature of the sustainment services for the F117 engine without evaluating the research and rationale used to support the claims. Pratt and Whitney asserted that the F117 engine sustainment services to be provided through the GISP contract were commercial in accordance

\(^7\) DFARS Subpart 244.4, “Subcontracts for Commercial Items and Commercial Components,” requires contractors to determine whether a particular subcontract item meets the definition of a commercial item.

Finding

with FAR 2.101, “Commercial Item” definition, paragraph 5. Specifically, that paragraph of the commercial item definition states that a maintenance or repair service is commercial if:

- it is procured in support of a commercial item,
- the source of the maintenance or repair service provides similar services at the same time to the general public, and
- the services are provided to the general public under terms and conditions similar to those offered to the Government.

**Pratt and Whitney Claimed Services Provided Were Commercial**

In September 2010, Pratt and Whitney referenced FAR 2.101, “Commercial Item” definition, paragraph 5 to assert that the F117 engine sustainment services to be provided through the GISP contract were commercial because they were to be purchased in support of a commercial item. In addition, Pratt and Whitney claimed that it provided similar services at the same time to the general public under similar terms and conditions to those offered to the AF, as cited above. Pratt and Whitney included the following justification for its assertion:

> Pratt & Whitney is an industry leader in commercial service programs including Fleet Management Programs, Materiel Management Programs, and Integrated Logistics Programs. The commercial aftermarket provides the basis for our FMP/MMP [fleet management program/materiel management program] experience and total sales volume. **Currently, Pratt & Whitney has over thirty Commercial Fleet Management Programs which are valued at over $35 billion.** This offer is for a program to support the F117 engine, which is purchased by the US Government as a commercial item under FAR Part 12. The F117 engine is substantially similar to the PW2000 commercial engine. [Emphasis Added]

Pratt and Whitney did not provide any data or additional documentation to support its commerciality claim to the AF or Boeing. At that time, Pratt and Whitney stated that it had over 30 commercial customers. This implied that those 30 commercial customers would be buying similar services under similar terms and conditions as included in Pratt and Whitney’s proposal for F117 engine sustainment services.

In October 2013, Pratt and Whitney submitted a commerciality claim for the F117 engine sustainment services to be acquired during the GISP contract option, and again asserted that the services were commercial in accordance with FAR 2.101, “Commercial Item” definition, paragraph 5. While Pratt and Whitney’s commerciality claim for the contract option provided a more detailed
description of sustainment services for the F117 engine, Pratt and Whitney did not identify the number of commercial customers acquiring the services or provide any documentation to support its claim. See Appendix B for Pratt and Whitney’s commerciality claim for the FY 2015 through FY 2017 GISP contract option.

During the audit, Pratt and Whitney provided us with some sales information on its PW2000 engine fleet management program service customers for calendar years 2010 through 2014. The information showed that Pratt and Whitney provided fleet management program services to only one commercial customer, but did not perform any maintenance services to that customer’s engines until October 2012. In addition, the information showed that Pratt and Whitney did not have any commercial fleet management customers for the PW2000 engine at the time of its September 2010 commerciality claim.

**Boeing’s Commerciality Determinations Were Unsupported**

DoD commercial item guidance states that contractor commerciality determinations are another source of information that contracting officers should consider when making their commerciality determinations. Boeing, as the prime contractor, was required by DFARS to determine whether sustainment services for the F117 engine to be provided through the GISP contract were commercial. Boeing made commerciality determinations in support of the GISP base contract and the GISP contract option. However, Boeing did not validate the information it relied on to support its commerciality determinations. Boeing did not assess the current market for F117 engine sustainment services and was denied commercial sales data from Pratt and Whitney to support its commerciality claim.

In support of the GISP base contract, Boeing reviewed Pratt and Whitney’s previously quoted commerciality claim for the GISP base contract and agreed that the services were commercial. Boeing did not prepare a new commerciality determination for the GISP base contract; instead, it submitted the commerciality determination from the predecessor contract. Boeing did not obtain comparative commercial sales data to support Pratt and Whitney’s commerciality claim. Boeing stated in its Price Analysis Report that Pratt and Whitney refused to provide commercial sales data.

In support of the GISP contract option, Boeing determined that the sustainment services for the F117 engine were commercial. The Boeing representative researched online to conclude that the sustainment services for the F117 engine were commercial. The representative focused solely on engine overhaul and repair. She did not assess the current market for any comparable F117 engine
fleet management program services in her commerciality determination for the GISP contract. She stated that Pratt and Whitney did not provide and would not allow Boeing to have access to any cost and pricing data.

**Engineers’ Opinions Lacked Support**

The GISP contracting officers requested AF engineers from the C-17 Division to perform technical evaluations and provide opinions on the commerciality for F117 engine sustainment services. In response, the contracting officers received opinions from two AF engineers and then relied on those opinions to determine commerciality of the sustainment services. However, the contracting officers should not have solely relied on these opinions because the engineers did not perform sufficient research or analysis to validate Pratt and Whitney's commerciality claims nor evaluate the current market conditions for the F117 engine sustainment services.

**Engineer Opinion on Commerciality for GISP Contract Award Not Sufficient**

On October 28, 2010, an AF engineer from the C-17 Division provided an opinion on the commerciality for F117 engine sustainment services to support the contracting officer's commerciality determination for the GISP base contract. The engineer provided the following statement in a brief e-mail:

I concur that the items and services supplied by Pratt & Whitney represent a combination of items that meet the standards of a commercial item. Their customers include commercial and other non-government entities. Also, the services requested are for an item (F117-PW-100) that is very similar to items available in the commercial marketplace (PW2000 engines, i.e., PW2037, PW2337 and PW2043), therefore meeting the definition of commerciality IAW [in accordance with] FAR 2.101.

The engineer did not document and could not recall what information he used to draw his conclusions. The engineer stated that he did not provide nor did the contracting officer request supporting documentation or analysis to support whether Pratt and Whitney's commercial customers were buying similar engine sustainment services under similar terms and conditions as the GISP contract. The engineer stated that when performing commerciality evaluations, he generally reviewed information on the vendor's website to determine whether an item or service was commercial. However, relying solely on the vendor's website without validating that information with other comparative data is not sufficient to support a commerciality claim. The contracting officer should have done more research or requested additional support to determine whether Pratt and Whitney's F117 engine sustainment services met the commercial services definition and a commercial market existed.
Engineer Opinion on Commerciality for GISP Contract Option Not Sufficient

On May 8, 2014, a different AF engineer from the C-17 Division provided his opinion on the F117 engine sustainment services commerciality to support the contracting officer’s commercial item determination for the GISP contract option. The engineer provided the following statement in a brief e-mail:

As in past evaluations regarding C-17 engines, spare parts and engine support/repair services, I concur with the contractor’s assertion that the engines, spare parts and support/repair services meet the definition of commercial items/services. While a limited number of parts may be C-17 application peculiar, they are “of a type” and thus meet the definition of [commercial item determinations]. With the engine historically maintained by Pratt and a commercial airline, any other conclusion would be all but unsupportable.

The engineer stated that the F117 engine sustainment services were commercial because these services were provided to support the F117 engine, which was a historically commercial item. The engineer did not evaluate the current market conditions for the F117 engine sustainment services to determine whether Pratt and Whitney provided similar engine sustainment services as the GISP contract to commercial customers. Instead, the engineer stated that he relied on his past experience to know that engine sustainment services were provided to commercial airlines.

Although experience can be used to determine whether Pratt and Whitney provided engine sustainment services in the past, business environments change. The engineer’s technical evaluation was not sufficient to determine whether the sustainment services for the F117 engine were commercial without current information on the engine sustainment services Pratt and Whitney provided to the general public and an analysis of how comparable those services were to the GISP contract’s terms and conditions. The contracting officer should not have relied on the engineer’s opinion and should have done more research or requested additional information before concluding that the F117 engine sustainment services to be provided through the GISP contract option were commercial.

The contracting officer should obtain the necessary documentation from Boeing to support the commerciality of the F117 engine sustainment service to be acquired during the GISP contract option, as defined by FAR 2.101. If Boeing cannot provide adequate support, the contracting officer should withdraw the July 2014 commerciality determination and deem the service noncommercial.
Air Force at Disadvantage in Sole-Source, Commercial Acquisition

(FOUO) USD(AT&L) memorandum, “Commercial Acquisitions,” January 5, 2001, cautions contracting officials to avoid commercial, sole-source situations because sole-source suppliers may exploit the lack of competitive markets and demand unreasonable prices. In this commercial, sole-source situation, Pratt and Whitney increased its negotiation leverage by refusing to provide critical information that the AF needed to evaluate the prices for the F117 engine sustainment services labeled as commercial. Without that information, the AF contracting officials could not develop an effective bargaining position. The AF will not know whether the estimated $3.76 billion it intends to spend over the next 7 years on the GISP contract for F117 engine sustainment services is a fair and reasonable price without adequate insight into the composition of the customer base or sales related to Pratt and Whitney’s engine sustainment services.

Commerciality Determination Limited Information Available to Contracting Officials

Pratt and Whitney increased its negotiation leverage by refusing to provide critical information that the AF needed to evaluate the prices for the F117 engine sustainment services labeled as commercial. For the GISP contract, the AF did not obtain sufficient supporting documentation from Pratt and Whitney for its commerciality claim but still negotiated the F117 engine sustainment services as a commercial acquisition. The FAR\(^9\) states that for a commercial item, the contracting officer is required to obtain adequate data on the price for which the same item or similar items have been sold to determine the reasonableness of its price. However, the FAR prohibits obtaining certified cost or pricing data\(^10\) for commercial items with the expectation that the competitive forces of the market will establish a fair and reasonable price. The FAR requires the contracting officer to obtain data other than certified cost and pricing data\(^11\) to support that the price is fair and reasonable, but does not require the contractor to provide such data.

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\(^9\) FAR Subpart 15.4, “Contract Pricing,” contains this requirement.

\(^10\) Certified cost or pricing data are required in certain procurements (purchases). The certification of data means that, to the best of the person’s knowledge and belief, the cost or pricing data are accurate, complete, and current as of a date certain before contract award.

\(^11\) Data other than certified cost or pricing data are related to prices, such as established catalog prices, market prices, or previous contract prices, or cost data necessary to determine a fair and reasonable price, but is not certified.
Pratt and Whitney Repeatedly Refused to Provide Air Force With Requested Information

AF contracting officials repeatedly requested commercial sales and cost data to support the price for F117 engine sustainment services. Pratt and Whitney repeatedly refused to provide it. To assist AF contracting officials, senior DoD and AF leadership requested this data but were also unsuccessful. If Pratt and Whitney continues to withhold information and not allow the AF insight into the actual costs of F117 engine sustainment services, then the AF should seek alternate sources for these services.

Air Force Could Not Obtain Commercial Sales and Cost Data

An AF official stated that she began requesting Pratt and Whitney’s commercial sales data in January 2011 for the GISP base contract award. The AF official stated that Pratt and Whitney would not provide the commercial sales data but instead requested a meeting with AF officials and provided them invoices to review. The AF official stated that Pratt and Whitney only allowed the contracting officials to review select invoices for engine overhauls. According to the AF official, the invoices were redacted so that it was not clear whether the invoices were for commercial customers, the extent of the services Pratt and Whitney provided to its customers, or the similarity of the invoiced services to the F117 engine sustainment services. The AF official also stated that Pratt and Whitney would not provide copies of the redacted invoices nor allow the review of any supporting documentation for those invoices.

In August 2011, the AF team responsible for the GISP contract attended a DoD peer review with the Director, Defense Pricing, who recommended that the team obtain F117 engine sustainment service cost data before entering into GISP contract negotiations. On August 15, 2011, the contracting officer requested that Pratt and Whitney provide the following information to support its proposed pricing for F117 engine sustainment.

- Actual labor hours and costs;
- Material costs;
- Overhead expenses;
- Subcontractor costs; and
- Realized profits on the predecessor contract.

12 DFARS 201.170, “Peer Reviews” requires DoD preaward peer reviews to be conducted for sole-source procurements valued at $500 million or more.
13 The Office of Defense Pricing reports to the USD(AT&L).
In response, Pratt and Whitney refused to provide this requested data and indicated that it had already provided sufficient information for determining price reasonableness. DoD should establish policy to instruct contracting officials as to what circumstances a contractor’s redacted invoices would be acceptable as support for commerciality or fair and reasonable price determinations.

**Air Force and DoD Leadership Unsuccessful in Obtaining Data from Pratt and Whitney**

After Pratt and Whitney’s refusal to provide cost data, senior leadership at both the Offices of Defense Pricing and the Assistant Secretary of the Air Force (Acquisition) (SAF/AQ) became involved in DoD’s efforts to obtain cost data from Pratt and Whitney. According to the Director, Defense Pricing, the Deputy Assistant Secretary for Contracting at SAF/AQ requested his assistance to obtain cost data from Pratt and Whitney. In response, the Director and the Deputy Assistant Secretary met with the President, Pratt and Whitney Military Engines twice to discuss the data request. The Director stated that he believed an agreement was reached, and Pratt and Whitney would provide the requested data. According to a SAF/AQ official, there was a draft agreement prepared by the AF to obtain data from Pratt and Whitney supporting multiple F117 engine contracts, including the GISP contract. However, despite involvement from senior DoD and AF officials, Pratt and Whitney did not provide the data. This may cause one to question whether Pratt and Whitney acted in accordance with the FAR which requires DoD and its contractors to conduct business with integrity, fairness, and openness.

**Air Force Denied Information for GISP Contract Option**

The AF issued multiple requests for information from February through June 2014 related to the GISP contract option pricing of the F117 engine sustainment services. Because Pratt and Whitney stated that the sustainment services for the F117 engine were commercial, the AF requested non-Government customer sales data to support the proposed prices. The FAR states that an offeror or contractor who does not comply with a requirement to submit information for a contract or subcontract is ineligible for award unless the Head of the Contracting Activity determines that it is in the best interest of the Government. As of December 2014, the AF has not received sufficient responses from Pratt and Whitney to support its

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14 FAR Subpart 1.1, “Purpose, Authority, Issuance,” section 1.102, “Statement of guiding principles for the Federal Acquisition System,” contains this requirement.
Finding

proposed pricing for F117 engine sustainment services in the GISP contract option. By not providing sufficient information to the AF to support its proposed pricing, Pratt and Whitney weakened the AF’s ability to effectively negotiate and protect the interests of the warfighter and the taxpayer.

Pratt and Whitney’s unwillingness to provide requested sales and cost data exploited the sole-source situation and may have resulted in the AF paying unreasonable prices for F117 engine sustainment services. If Pratt and Whitney remains unwilling to provide data that a reasonable business person can use to make a commerciality determination, the AF should only contract or subcontract with Pratt and Whitney as a last resort and should prepare a written plan that allows for the development of a competitive market for F117 engine sustainment. The contracting officer should also report Pratt and Whitney’s refusal to provide requested information in the Contractor Performance Assessment Reporting System,\(^\text{15}\) as required by Air Force FAR Supplement MP5315.4. Also, DoD should establish policy for oversight of future AF contracts or subcontracts with Pratt and Whitney and should not allow the AF to contract with Pratt and Whitney for F117 engine sustainment services unless Pratt and Whitney provides the necessary information to support commerciality and fair and reasonable price determinations.

Pratt and Whitney Withholding Information From DoD IG Until Air Force Negotiations Complete

On June 26, 2014, we requested that the President, Pratt and Whitney Military Engines, provide information on Pratt and Whitney’s customers for commercial PW2000 engine sustainment services. We also requested cost information related to the sustainment services for the F117 engine that Pratt and Whitney provides to the AF. Pratt and Whitney retained legal counsel to respond to our data request. Pratt and Whitney provided some information on one commercial customer for PW2000 engine sustainment services. However, Pratt and Whitney would not provide cost data because it was concerned that the AF may obtain this information to use during GISP contract option negotiations. Pratt and Whitney also requested that we not release our review of its cost data in an audit report until after GISP contract option negotiations were concluded. We did not agree to these terms. We issued a subpoena to Pratt and Whitney on October 27, 2014,

\(^{15}\) The Contractor Performance Assessment Reporting System is a web-enabled application used by DoD to collect information on a contractor’s performance to provide a record, both positive and negative, on a given contractor.
to obtain additional information on its commercial customers and F117 engine sustainment costs. Pratt and Whitney did not comply with the subpoena as of the issuance of this report.

**Air Force at High Risk of Paying Too Much for F117 Engine Sustainment**

The AF allowed itself to be exploited in its acquisition of F117 engine sustainment services by acquiring the services as commercial without performing sufficient analysis to conclude that a commercial market existed for those services being acquired through the GISP contract. Unless the AF takes prompt corrective action, it remains at high risk of paying too much for those services. According to an AF official, the AF plans to continue flying C-17 aircraft until at least 2040. With more than 25 years left in the life of the C-17 fleet, the AF can expect to spend billions of dollars on F117 engine support and needs to validate that it is obtaining F117 engine sustainment services at fair and reasonable prices and at the best value for the taxpayer.

It might not be in DoD’s best interest to continue to obtain F117 engine sustainment support from Pratt and Whitney under these circumstances. As cautioned by the USD (AT&L) in his 2001 commercial acquisition memorandum, commercial sole-source situations present opportunities for a contractor to exploit the lack of competitive markets and demand unreasonable prices. If the AF continues to use Pratt and Whitney to fulfill its F117 engine sustainment requirement, then it needs to obtain sufficient information to determine if the services it is buying are:

- similar to those that Pratt and Whitney is selling to its commercial customers;
- sold in substantial quantities; and
- sold during the same time frame.

If Pratt and Whitney will not provide that information, then the AF should buy minimum quantities and seek to qualify alternate sources for these services.
Management Comments on the Finding and Our Response

The Principal Deputy, Office of the Assistant Secretary of the Air Force (Acquisition & Logistics), responding for the Assistant Secretary of the Air Force (Acquisition), stated that the contracting officer determined that the F117 engine sustainment services were commercial in accordance with FAR 2.101. The Principal Deputy stated the contracting officer made his determination by verifying that the predecessor contract treated the engine sustainment services as commercial. The Principal Deputy further explained that the contracting officer reviewed Boeing’s commercial item determination, Pratt and Whitney’s assertions, and assessed the AF engineer’s written concurrence of commerciality. The Principal Deputy stated that in 2012, the AF issued a request for information regarding a future F117 engine sustainment requirement, which further supported a commercial determination. He explained that the AF attempted to compete the F117 engine sustainment service requirement; however, no viable offers were received and the competition was canceled.

Our Response

As stated in the finding, the AF contracting officers involved with the negotiation of the base and FY 2015 through 2017 option contracts did not support that the sustainment services obtained for the F117 engine were commercial services. The contracting officers determined that the sustainment services for the F117 engine were commercial without assessing whether a commercial market existed as required by Federal and DoD acquisition regulations and guidance. We agree that the contracting officer should have considered whether the sustainment services for the F117 engine were acquired as commercial services under the predecessor contract. However, business environments change and the contracting officer should have determined whether a commercial market existed as required by Federal and DoD acquisition regulations and guidance.

With regard to Boeing’s commerciality determinations, Boeing did not validate the information it relied on to support its commerciality determinations, did not assess the market for F117 engine sustainment services, and was denied commercial sales data from Pratt and Whitney to support its commerciality claim. In addition, as outlined in the report, the engineer’s technical evaluations were not sufficient to determine whether the sustainment services for the F117 engine were commercial without current information on the engine sustainment services Pratt and Whitney provided to the general public and an analysis of how comparable those services were to the GISP contract’s terms and conditions. The contracting officers should not have relied on the engineers’ opinions or Boeing’s commerciality
determinations and should have done more research or obtained additional information before concluding that the F117 engine sustainment services to be provided through the GISP contract were commercial. Finally, the AF attempt to compete the requirement for F117 engine sustainment services does not support a claim of commerciality.

Recommendations, Management Comments, and Our Response

We considered comments to recommendations on a draft of this report. The Principal Deputy, Office of the Assistant Secretary of the Air Force (Acquisition & Logistics), responded for the Assistant Secretary of the Air Force (Acquisition) and the Director, Contracting Directorate, Air Force Life Cycle Management Center. A summary of the comments from the Principal Deputy and the Director, Defense Pricing, along with our response follows. The complete text of the comments can be found in the Management Comments section at the end of the report.

Recommendation 1

We recommend that the Assistant Secretary of the Air Force (Acquisition) require the contracting officer to:

   a. Obtain the necessary documentation to support the commerciality of the F117 engine sustainment service to be acquired in the FY 2015 through FY 2017 Globemaster III Integrated Sustainment Program contract option and any future contracts, as defined by Federal Acquisition Regulation 2.101. If adequate support is not obtained, deem the service noncommercial.

Assistant Secretary of the Air Force (Acquisition) Comments

The Principal Deputy, Office of the Assistant Secretary of the Air Force (Acquisition & Logistics), responding for the Assistant Secretary of the Air Force (Acquisition), agreed, stating that a team composed of representatives from the AF, the U.S. Naval Supply Systems Command Price Fighters,16 and the Defense Contract Management Agency began collaborating in October 2014 to assess the commerciality and price reasonableness of the F117 engine sustainment services to be purchased in the FY 2015 through FY 2017 GISP contract option.17 The Principal Deputy stated that the contracting officer will use the team's recommendations, along with Boeing's

16 Price Fighters perform various types of cost, price, and engineering analyses for government customers.
17 According to the contracting officer, the Defense Contract Management Agency requested additional information from Boeing to complete its commerciality assessment. As of December 15, 2014, the Defense Contract Management Agency had not received the requested information.
updated GISP contract option proposal and other additional documentation Boeing or Pratt and Whitney provides to determine whether the F117 engine sustainment services are commercial. The Principal Deputy stated that if the definition of commerciality set forth in FAR 2.101 is not met, the contracting officer will deem the services noncommercial.

**Our Response**

Comments from the Principal Deputy addressed all specifics of the recommendation, and no further comments are required.

b. **Report Pratt and Whitney’s refusal to provide requested information in the Contractor Performance Assessment Reporting System, as required by Air Force Federal Acquisition Regulation Supplement MP5315.4, so it is available for use by contracting officials.**

**Assistant Secretary of the Air Force (Acquisition) Comments**

The Principal Deputy, Office of the Assistant Secretary of the Air Force (Acquisition & Logistics), responding for the Assistant Secretary of the Air Force (Acquisition), agreed, stating that the Contractor Performance Assessment Reporting System is used to report performance of the prime contractor, so reporting Pratt and Whitney’s refusal within a Boeing report would not necessarily be visible to contracting officials who are working with Pratt and Whitney. However, the Principal Deputy explained that Boeing’s failure to adequately document and assess commerciality determinations submitted in support of Pratt and Whitney’s subcontractor proposals could be documented and would be of interest to contracting officials who are working with Boeing.

**Our Response**

Comments from the Principal Deputy addressed the specifics of the recommendation, and no further comments are required. We agree that the Contractor Performance Assessment Reporting System is used to support the performance of prime contractors. According to the DoD Guidance for the Contractor Performance Assessment Reporting System, issued July 2014, evaluation of a contractor’s performance should include information on the ability of a prime contractor to manage and coordinate subcontractor efforts. An official from the Office of the Assistant Secretary of the Air Force (Acquisition) clarified its response on November 26, 2014, and stated that the AF plans to report Boeing’s management of Pratt and Whitney, which includes documenting Boeing’s failure to adequately assess and document Pratt and Whitney’s commerciality determinations, in the Contractor Performance Assessment Reporting System.
**Recommendation 2**

We recommend that the Assistant Secretary of the Air Force (Acquisition) prepare a written plan that allows for the development of a competitive market for F117 engine sustainment.

**Assistant Secretary of the Air Force (Acquisition) Comments**

The Principal Deputy, Office of the Assistant Secretary of the Air Force (Acquisition & Logistics), responding for the Assistant Secretary of the Air Force (Acquisition), agreed, stating that a new F117 engine sustainment acquisition strategy was presented to the Assistant Secretary of the Air Force (Acquisition) in July 2014 and approved in October 2014. The Principal Deputy stated that an objective of the new strategy is to acquire technical and supply chain management data from Pratt and Whitney through a sole-source contract with Pratt and Whitney for F117 engine sustainment. The Principal Deputy explained that potential competitors for F117 engine sustainment would require 3 to 5 years of technical and supply chain management data to effectively compete and manage F117 engine sustainment. The Principal Deputy stated that the AF would assess the sole-source contract and management data obtained three years after contract award to determine whether it would continue the sole-source arrangement.

**Our Response**

Comments from the Principal Deputy, Office of the Assistant Secretary of the Air Force (Acquisition & Logistics) addressed the specifics of the recommendation and no further comments are required. The AF should not award a sole-source contract to Pratt and Whitney for F117 engine sustainment unless the contract includes provisions requiring Pratt and Whitney to provide the technical and supply chain management data to the AF.

**Recommendation 3**

We recommend that the Director, Defense Pricing:

a. Establish policy for oversight of future U.S. Air Force contracts or subcontracts with Pratt and Whitney to ensure the U.S. Air Force has the necessary information to support commerciality and fair and reasonable price determinations before contract award.

**Defense Pricing Comments**

The Director, Defense Pricing, agreed, stating that he and the Director, Defense Procurement and Acquisition Policy will use the existing peer review process to ensure the AF has the necessary information to support commerciality and fair and reasonable price determinations before contract award.
Our Response
Comments from the Director, Defense Pricing addressed all specifics of the recommendation, and no further comments are required.

b. Not allow the U.S. Air Force to contract with or consent to subcontract with Pratt and Whitney for F117 engine sustainment services unless Pratt and Whitney provides the necessary information to support commerciability and fair and reasonable price determinations.

Defense Pricing Comments
The Director, Defense Pricing, agreed that the AF should not award or consent to a subcontract for F117 engine sustainment services unless Pratt and Whitney provides the necessary information to support commerciability and fair and reasonable price determinations. The Director explained that he acts as an advisor through the peer review process and oversight is the responsibility of the Service Acquisition Executive. The Director agreed to advise the AF Service Acquisition Executive accordingly. The Director also agreed to work with the AF to obtain the necessary information from Pratt and Whitney to support commerciability and fair and reasonable price determinations for F117 engine sustainment services during the review and approval of the acquisition plan in 2015. On November 25, 2014, the Director recommended to the Assistant Secretary of the Air Force (Acquisition) that he not enter into a contract with Pratt and Whitney for the sustainment, maintenance, repair, and overhaul of the F117 engine until the AF has obtained sufficient cost information from the contractor to determine that the AF is paying a fair and reasonable price.

Our Response
Comments from the Director, Defense Pricing addressed all specifics of the recommendation, and no further comments are required.

c. Establish policy to instruct contracting officials as to what circumstances a contractor’s redacted invoices would be acceptable as support for commerciability or fair and reasonable price determinations.

Defense Pricing Comments
The Director, Defense Pricing agreed to establish guidance. He stated that the March 2015 revision of the Commercial Item Handbook will describe situations when a contractor’s redacted invoices would be acceptable for contracting officials to use as support for fair and reasonable price determinations.

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18 The Air Force Service Acquisition Executive is the Assistant Secretary of the Air Force (Acquisition).
Our Response
Comments from the Director, Defense Pricing addressed all specifics of the recommendation, and no further comments are required.

Recommendation 4
We recommend that the Director, Contracting Directorate, Air Force Life Cycle Management Center perform a quality review of Air Force Life Cycle Management Center contracting officials’ compliance with the Federal and Defense acquisition regulations for commerciality determinations and, based on that review, consider corrective actions as appropriate.

Air Force Life Cycle Management Center Comments
The Principal Deputy, Office of the Assistant Secretary of the Air Force (Acquisition & Logistics), responding for the Director, Contracting Directorate, AFLCMC, agreed, stating that the Contracting Director, Air Force Materiel Command, will perform the recommended review to ensure compliance both within AFLCMC and across the other Centers within Air Force Materiel Command. Based on that review, the Principal Deputy stated that the Contracting Director will consider corrective actions as appropriate. Additionally, the Principal Deputy stated that the Contracting Director will review internal control concerns addressed in the report, and based on that review, will consider corrective actions as appropriate.

Our Response
Comments from the Principal Deputy addressed all specifics of the recommendation, and no further comments are required.

19 Air Force Materiel Command consists of five Centers and 21 staff directorates. The five Centers are: Air Force Nuclear Weapons Center, Air Force Research Laboratory, Air Force Life Cycle Management Center, Air Force Test Center, and Air Force Sustainment Center.
Appendix A

Scope and Methodology

We conducted this performance audit from March 2014 through October 2014 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our objective was to determine whether AF officials used cost-effective measures to sustain the F117 engine. This report is the first in a series that will address that objective. For this report, we focused on assessing whether the AF’s commerciality determinations for F117 engine sustainment services were supported.

Assessing AF’s Commerciality Determination

Pratt and Whitney claimed that its F117 engine sustainment services were commercial for the FY 2012 through FY 2014 GISP base contract FA8526-12-D-0001 and FY 2015 through FY 2017 contract option in accordance with FAR 2.101, “Commercial Item” definition, paragraph 5. AF contracting officers determined that the F117 engine sustainment services to be acquired through the GISP base contract and contract option were commercial.

To determine whether the AF’s commerciality determinations were supported, we compared FAR 2.101, “Commercial item” definition, paragraph 5, to:

- Pratt and Whitney’s commerciality claims;
- AF engineers’ technical evaluations of those claims;
- Boeing’s commerciality determinations; and
- AF contracting officers’ commerciality determinations.

We also compared the contracting officers’ commerciality determinations to DFARS Subpart 212.1 and DFARS PGI 212.1 requirements and best practices outlined by the USD(AT&L) “Commercial Item Handbook,” Version 1.0, November 2001.

We interviewed:

- AF contracting officers who signed the AF commerciality determinations;
- AF engineers who provided their opinions on the commerciality of the F117 engine sustainment services;
• Boeing officials regarding the commerciality determinations it submitted as part of its GISP contract proposals; and
• AFLMC officials from Tinker AFB to determine the AF’s plans for future F117 engine sustainment.

(FOUO) We estimated that the AF intends to spend $3.76 billion on F117 engine sustainment from FY 2015 through FY 2021. We calculated this amount using the contract amount the AF will pay for F117 engine sustainment from October 2014 through March 2015 and multiplied it by the time remaining on contract, if all options are exercised. The additional estimated $3.76 billion to be spent on F117 engine sustainment services may increase or decrease because of future contract negotiations or changes in actual AF flying hours and engine cycles.

Use of Computer-Processed Data
We did not rely on computer-processed data to support our findings and conclusions.

Use of Technical Assistance
We did not use technical assistance to perform this audit.

Prior Coverage
During the last 5 years, the Department of Defense Inspector General (DoD IG) issued three reports discussing fair and reasonable pricing for sole-source, commercial spare parts, lack of contractor cooperation, and prime contractor’s analysis of subcontractor’s proposals. Unrestricted DoD IG reports can be accessed at http://www.dodig.mil/pubs/index.cfm.

DoD IG


Appendix B

Pratt and Whitney Commerciality Claim for GISP Contract Option

Pratt and Whitney submitted the following commerciality claim for F117 engine sustainment services to be acquired in the FY 2015 through FY 2017 GISP contract option. As stated in the finding, Pratt and Whitney did not provide documentation to the AF to support its claim.
Pratt and Whitney Commerciality Claim for GISP Contract Option

5.2 OFFEROR’S ASSERTION OF COMMERCIALITY

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Pratt &amp; Whitney</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>F117 MSRP GISP Sustainment</td>
</tr>
<tr>
<td>Buyer RFP / RFQ</td>
<td>GSAS-SM-MKC-13-016</td>
</tr>
</tbody>
</table>

The offeror is requested to complete this form and provide pertinent supporting information for use by the buyer in determining whether the offeror’s product or service qualifies as a commercial item as defined in FAR Part 2.101. Please complete Sections 1 and 2.

**SECTION 1:** Does the above product qualify as a commercial item as defined in FAR? Please read the Qualifying Statements below and check “Yes” or “No” for each statement. If commercial, check the one Qualifying Statement that best describes the product or service.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commercial Item Qualifying Statements (from FAR Part 2.101)</strong></td>
<td></td>
</tr>
<tr>
<td>(1)</td>
<td>Any item, other than real property, that is of a type customarily used by the general public or by non-governmental entities for purposes other than governmental purposes, and:</td>
</tr>
<tr>
<td></td>
<td>a. Has been sold, leased, or licensed to the general public; or,</td>
</tr>
<tr>
<td></td>
<td>b. Has been offered for sale, lease, or license to the general public.</td>
</tr>
<tr>
<td>(2)</td>
<td>Any item that evolved from an item described in statement (1) above through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation.</td>
</tr>
<tr>
<td>(3)</td>
<td>Any item that would satisfy a criterion expressed in statements (1) or (2) above, but for modifications of a type customarily available in the commercial marketplace.</td>
</tr>
<tr>
<td>(4)</td>
<td>Any item that would satisfy a criterion expressed in statements (1) or (2) above, but for minor modifications of a type not customarily available in the commercial marketplace made to meet Federal Government requirements.</td>
</tr>
<tr>
<td>✓ (5)</td>
<td>Installation services, maintenance services, repair services, training services, and other services if:</td>
</tr>
<tr>
<td></td>
<td>a. Such services are procured for support of an item referred to in statements (1), (2), (3), or (4) above, regardless of whether such services are provided by the same source or at the same time as the item; and,</td>
</tr>
<tr>
<td></td>
<td>b. The source of such services provides similar services contemporaneously to the general public under terms and conditions similar to those offered to the Federal Government.</td>
</tr>
<tr>
<td>(6)</td>
<td>Any combination of items meeting the requirements of statements (1) through (5) above that are of a type customarily combined and sold in combination to the general public.</td>
</tr>
<tr>
<td>(7)</td>
<td>Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed or specific outcomes to be achieved and under standard commercial terms and conditions.</td>
</tr>
<tr>
<td>(8)</td>
<td>Any item, combination of items, or service referred to in paragraphs (1) through (6) of this definition, notwithstanding the fact that the item, combination of items, or service is transferred between or among separate divisions, subsidiaries, or affiliates of a contractor.</td>
</tr>
<tr>
<td>(9)</td>
<td>A non-developmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to multiple State and local governments.</td>
</tr>
</tbody>
</table>
OFFEROR’S ASSERTION OF COMMERCIALITY

SECTION 2: How does the Product qualify as a commercial item? Please provide a narrative explanation below and evidence to support the assertion from Part 1.

Instructions: Use the following information as a guide to explaining and supporting your commercial item assertion. Please replace these instructions and the below prompts with information specific to the Product that your company is proposing and in support of the Qualifying Statement that you checked in Section 1.

1) Product is traded commercially or evolved from a commercially-traded item (Section 1, check box 1 or 2):

Product is traded commercially. Explain how and attach evidence of offer, sale, lease or license of the Product to the general public or non-government entities.

2) Product evolved from a commercially-traded item. Describe the evolution of the Product from the commercially-traded item and describe/provide evidence of sales of the commercially-traded item.

Product is similar to a commercially-traded item (Section 1, check box 3 or 4):

3) Modification of the Product is of a type customarily available in the commercial marketplace. Describe the modification and the availability of the modification in the commercial marketplace. Describe/provide evidence of sales of the commercially-traded item.

4) Minor modification of the Product is of a type that is not customarily available in the commercial marketplace. Explain why the mod is minor and provide supporting evidence. Describe/provide evidence of sales of the commercially-traded item.

Other Qualifying Statement from the commercial item definition (Section 1, check boxes 5-8):

Explain the basis for the assertion and provide supporting evidence.

<table>
<thead>
<tr>
<th>OFFEROR REPRESENTATIVE NAME</th>
<th>TITLE</th>
<th>DATE OF ASSERTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Les Katahara</td>
<td>Director, P&amp;W Military Contracts</td>
<td>2 October 2013</td>
</tr>
</tbody>
</table>
Pratt and Whitney Commerciality Claim for GISP Contract Option (cont’d)

OFFEROR'S ASSERTION OF COMMERCIALITY

Definitions (from FAR)
Catalog price - means a price included in a catalog, price list, schedule, or other form that is regularly maintained by the manufacturer or vendor, is either published or otherwise available for inspection by customers, and states prices at which sales are currently, or were last, made to a significant number of buyers constituting the general public.

Market prices - means current prices that are established in the course of ordinary trade between buyers and sellers free to bargain and that can be substantiated through competition or from sources independent of the offeror.

Minor modifications - means modifications that do not significantly alter the nongovernmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor.

Non-developmental item means:
(1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;
(2) Any item described in paragraph (1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or
(3) Any item of supply being produced that does not meet the requirements of paragraph (1) or (2) solely because the item is not yet in use.

Definitions (Boeing terms)
Qualifying Statement - The nine statements that are listed in Section 1 of this form. Each qualifying statement is taken from the definition of Commercial Item as described in the Federal Acquisition Regulation (FAR).
Offeror's Assertion of Commerciality-FY15-17 GISP MSRP Proposal
Supporting Statement

1. The F117 engine is part of the PW2000 family of commercial engines, with approximately 800 PW2000s still in service. The F117-PW-1000 has a specific model designation for the C-17 aircraft installation. The PW2000 is sold to non-government customers for non-government purposes, with minor modifications that P&W designed so that the engine would operate on the C-17 aircraft but that do not significantly alter the function or essential physical characteristics of the engine. In total, there are 11 engine models included on the Type Certificate Data Sheet (E17NE), each of which have varying degrees of modification to adapt to installation on their respective aircraft. Since its entry into USAF service in 1993, the F117 engine has been purchased as a commercial item under FAR Part 12.

2. The hardware that will be purchased under the anticipated contract falls squarely within the definition of a commercial item under FAR 2.101. Most of the parts in an F117 engine by part count are the same parts as those in a PW2000 engine, which powers the Boeing 757 aircraft in commercial operation around the world. Though figures are not readily available, P&W’s experience suggests that parts requiring repair or replacement under sustainment of the F117 engine are predominantly PW2000 common parts, most likely exceeding the new engine part-count figure. The PW2000 common parts supplier by the OEM are the same commercial items sold in substantial quantities in the commercial marketplace, meaning that those parts not only meet the definition aCO a commercial item but also meet the definition of commercial-off-the-shelf (COTS). In fact, P&W relies on the COTS exception to the specialty metals clause (DFARS 252.225-7009) to comply with that source restriction for PW2000 common parts.

3. The services that P&W will supply under the anticipated contract meet the definition of services in support of a commercial item. The services are in support of an engine that the USG has consistently determined to meet the definition of a commercial item. P&W and our subcontractors provide similar services for support of PW2000 engines under terms and conditions similar to those under which we perform F117 support. P&W has always provided F117 sustainment via a commercial item subcontract.

4. Because PW2000 models power a significant portion of the Boeing 757 aircraft fleet worldwide, the fleet is supported by a highly competitive market of commercial overhaul and part repair businesses. P&W is a part of this competitive market for PW2000 overhaul, and P&W uses a selection of the same suppliers and internal business to support the F117 fleet sustainment program. P&W has an integrated production and procurement structure for the combined fleet of PW2000/F117 commercial engines.

5. The F117-PW-100 engine is maintained in a commercial network of overhaul shops and repair facilities. This network permits the USAF to benefit from the established facilities, tooling, and integrated management systems that support the
Pratt and Whitney Commerciality Claim for GISP Contract Option (cont’d)

PW2000 and other commercial fleets. This includes ADEM, software that provides an enhanced engine health monitoring and maintenance planning solution offered to Customers through our Engine Management Program (EMP) services. EMPs can include different levels of service as required by our customers, with the base level where customers have access to and support of ADEM software tools to perform their own monitoring, up to levels that include P&W day-to-day monitoring, analysis, reporting and removal forecasting. Because this proprietary commercial tool is integrated with P&W’s other proprietary commercial planning and forecasting tools, the services that P&W provides to support the F117 engine are substantially the same as those provided to commercial customers.

6. We recognize that the mission and usage of a C-17 aircraft, and, therefore an F117 engine, differs from commercial usage. The practical impact on engine maintenance and support, however, is a difference in severity of wear, not a fundamental difference in how the product is maintained. After all, if an OEM-supplied PW2000 common part needs to be repaired or replaced on an F117 engine, the part that is replaced is the same, regardless of why or how often the part needs to be repaired or replaced. Furthermore, through the use of ADEM and other commercial tools, P&W’s experience with commercial engine fleets including the PW2000-powered fleets improves our ability to forecast F117 engine overhauls and to make optimal repair or replace recommendations. Though the C-17 mission may be unique, such uniqueness does not fundamentally change the support that P&W provides for the F117 engines versus the PW2000 fleet.

7. As a commercially certified product, all maintenance data and processes for the F117 engine were developed at P&W expense to commercial FAA standards, similar to other PW2000 models. With respect to overhaul, component repair and transportation for the F117 engine, P&W does not use any military-specific processes; instead, P&W uses the same overhaul, component repair and transportation processes that are customarily used for other PW2000 engine models and for many other Commercial Engines.

8. Compared to other PW2000 models, the F117 is only different because its military application. The differences between the F117 and other PW2000 models are because of the different requirements and installation packaging typical of different aircraft types/models that exist in the commercial aircraft market. Within the PW2000 family, engine models vary because of the variations among the aircraft, regardless of whether the aircraft are military or commercial. All of these variations among PW2000 engine models are certified by the FAA at P&W expense, and the published supporting data meets commercial standards that do not require a commercial vendor to change its commercial practices to accomplish maintenance. The C-17 GEC, similar to the one used on the Boeing 757, is not provided by P&W and is removed and installed in accordance with instructions supplied by Boeing and standard commercial practices, which do not include unique military processes.
Pratt and Whitney Commerciality Claim for GISP Contract Option (cont’d)

9. The basic support equipment required for the depot repair of F117 core engines is essentially common to the PW2040 engine. Test cell hardware and software for the PW2000 family of engines are highly common from model to model, including the F117. There are only minor differences between the F117 and other PW2000 engine models, all of which are the same type of differences among other commercial engines that are installed on different aircraft. F117 engine testing with full QEC installed, as required by the USAF, involves differences in hardware and software unique to the C-17 QEC components, which were designed and provided by Boeing. The unique test cell hardware and software differences are not specific to the military mission of the C-17 and similar testing of hardware and software would be required if a commercial operator were to require propulsion system (full QEC) testing of a PW2040.

10. The support equipment required for transporting an F117 engine without QEC installed is the same support equipment that is required to transport any other PW2000 engine model without QEC installed. Transporting an engine in full QEC can require different handling equipment than a bare engine. However, the support equipment used to transport a full QEC F117 can also be used to transport a base F117 or a base PW2000. P&W works with the customers of the PW2000 family of engines to provide support equipment to meet their needs, and P&W works with the appropriate aircraft manufacturer to modify equipment to accommodate QEC transportation. The F117 and other PW2000 engine models use common module shipping containers.

11. The PW2000, F117 and other commercial engines are currently maintained within a common network of Federal Aviation Requirements (FAR) 145-certified shops for overhauls, parts and repairs. To deliver the overhaul engine quality and reliability that our customers expect, maintenance of the F117 is based on FAA quality control systems supplemented by P&W quality requirements. P&W follows these quality requirements to subcontractors. There are no requirements for separate overhaul/repair lines for the PW2000 engine models or their parts. To avoid migration of USAF-operated material into commercial use, P&W overhaul and repair facilities use the same material control processes used for segregating customer-specific parts within commercial shops that perform 3rd party work. Repair facilities are required to manage the ITAR requirements of military parts in a manner similar to the management of commercial technologies under the EAR.
Management Comments

Defense Pricing

MEMORANDUM FOR PROGRAM DIRECTOR OF ACQUISITION, PARTS, AND INVENTORY, OFFICE OF THE INSPECTOR GENERAL

THROUGH: DIRECTOR, ACQUISITION RESOURCES AND ANALYSIS


As requested, I am providing responses to the general content and recommendations contained in the subject report.

Recommendation 3:
Recommend that the Director, Defense Pricing:

a. Establish policy for oversight of future U.S. Air Force contracts or subcontracts with Pratt and Whitney to ensure the U.S. Air Force has the necessary information to support commerciality and fair and reasonable price determinations before contract award.

b. Not allow the U.S. Air Force to contract with or consent to subcontract with Pratt and Whitney for F117 engine sustainment services unless Pratt and Whitney provides the necessary information to support commerciality and fair and reasonable price determinations.

c. Establish policy to instruct contracting officials as to what circumstances a contractor’s redacted invoices would be acceptable as support for commerciality or fair and reasonable price determinations.

Response:

a. Concur. The existing DoD Policy for "Peer Reviews of Contracts for Supplies and Services" focuses on improving the quality of contract processes across the Department and facilitates sharing best practices and lessons learned. Rather than develop a unique contract specific process for the U.S. Air Force, the Director, Defense Pricing and Director, Defense Procurement and Acquisition Policy will continue to utilize the existing process that is serving the Department well. As part of future reviews, this mature process will ensure the U.S. Air Force, or any other Component, has the necessary information to support commerciality and fair and reasonable price determinations before the contract award.

b. Concur. Oversight is the responsibility of the Senior Acquisition Executive, and the Director, Defense Pricing acts as an advisor throughout the peer review process. I concur with your finding that the Air Force not award a contract or consent to a subcontract for
Defense Pricing (cont’d)

F117 engine sustainment services unless Pratt and Whitney provides the necessary information to support commerciality and fair and reasonable price determinations. The Director, Defense Pricing will advise the Air Force Service Acquisition Executive accordingly. In addition, the Director, Defense Pricing will work with the Air Force to obtain the necessary information from Pratt and Whitney to support commerciality and fair and reasonable price determinations for F117 engine sustainment services during the review and approval of the Acquisition Strategy, scheduled for January 2015.

c. Concur. The revised Commercial Item Handbook, currently planned for publication in March 2015, will describe to contracting officials under what circumstances a contractor’s redacted invoices would be acceptable as support for fair and reasonable price determinations, commercial or otherwise.

Please contact: [Redacted] if additional information is required.

Shay D. Assad
Director, Defense Pricing
Assistant Secretary of the Air Force (Acquisition)

MEMORANDUM FOR Department of Defense Inspector General (DoDIG)

ATTN: Assistant Inspector General Acquisition, Parts and Inventory


1. The Office of the Assistant Secretary of the Air Force (Acquisition) (SAF/AQ) has reviewed the subject draft report and endorses the attached responses which incorporates inputs from the Air Force Program Executive Officer for Mobility (AFLCMC/WL) and a specific response by the Director, Contracting Directorate, Air Force Life Cycle Management Center (AFLCMC/PK) on Recommendation 4.

2. The SAF/AQ point of contact is [REDACTED] or at [REDACTED]

RICHARD W. LOMBARDI
Principal Deputy, Office of the Assistant Secretary of the Air Force (Acquisition & Logistics)

Attachment:
SAF/AQ Response to F117 Engine Sustainment DoDIG Draft Report
Assistant Secretary of the Air Force (Acquisition) (cont’d)

SAF/AQ Response
U.S. Air Force May Be Paying Too Much for F117 Engine Sustainment
Project No. D2014-D000AG-0133.000

General Response to the Overall Finding: The Contracting Officer (CO) for GISP determined commerciality of F117 Engine Sustainment Support (ESS) through verifying that the predecessor contract (FA8614-04-C-2004, the “Globemaster Sustainment Partnership” contract) treated engine sustainment support as commercial services, reviewing Boeing’s Commercial Item Determination (CID), reviewing Pratt & Whitney’s continued written assertions of commerciality, and assessing the Government engineer’s written concurrence of commerciality. The CO determined that these services are commercial IAW FAR 2.101. This analysis, combined with a properly executed CID, resulted in the CO’s decision to award these services to Boeing as a commercial item. Additionally, in 2012 the AF issued a Request for Information (RFI) that further supported a commercial determination for future F117 ESS. Based on this the AF then attempted to compete the F117 ESS; however, no viable proposal was received which eventually resulted in cancelation of this requirement.

The following provides a response to the recommendations in the report.

Recommendation 1. We recommend that the Assistant Secretary of the Air Force (Acquisition) require the contracting officer to:

1.a. Obtain the necessary documentation to support the commerciality of the F117 engine sustainment service to be acquired through the FY 2015 through FY 2017 GISP contract option and any future contracts, as defined by Federal Acquisition Regulation 2.101. If adequate support is not obtained, deem the service noncommercial.

Response 1.a. Concur with Intent

A team comprised of personnel representing Robins AFB, Tinker AFB, the US Navy’s Naval Supply Systems Command Price Fighters, and the Defense Contract Management Agency (DCMA) commercial Integrated Cost Analysis Team (ICAT) began collaborating on 21 Oct 14 to assess the issues of commerciality and price reasonableness for the FY15-FY17 engine support requirement and to provide recommendations to the GISP Procuring Contracting Officer (PCO). DCMA’s response regarding its commerciality assessment is expected on or about 1 Dec 14, which is also the estimated date for Boeing’s submission of its updated proposal. These recommendations, Boeing’s revised proposal, and any additional supporting documentation provided by Boeing or Pratt and Whitney, will be used by the PCO to determine whether the definition of commerciality set forth in FAR 2.101 is met; if not, the service will be determined noncommercial. The commerciality of future engine support contracted for outside of the instant requirement will be addressed at that time by the cognizant PCO.

1.b. Report Pratt and Whitney’s refusal to provide requested information in the Contractor Performance Assessment Reporting System, as required by Air Force Federal Acquisition Regulation Supplement MP5315.4, so it is available for use by contracting officials.
Assistant Secretary of the Air Force (Acquisition) (cont’d)

Response 1.b. Concur with Intent

The Contractor Performance Assessment Reporting System (CPARS) is used to report performance of the prime contractor, so reporting Pratt and Whitney’s refusal within a Boeing CPARS report would not necessarily be visible to contracting officials who are working with Pratt and Whitney. However, Boeing’s failure to adequately document and assess Commercial Item Determinations submitted in support of Pratt and Whitney’s subcontractor proposals can be documented in accordance with MP5315.4 and would be of interest to contracting officials who are working with Boeing.

Recommendation 2. We recommend that the Assistant Secretary of the Air Force (Acquisition) prepare a written plan that allows for the development of a competitive market for F117 engine sustainment.

Response 2. Concur

A new engine sustainment strategy was presented to SAF/AQ on 31 Jul 14 and approved 23 Oct 14. An objective of the new strategy is to acquire Technical and Supply Chain Management (SCM) data in order to posture the USAF for future sustainment decisions, such as competition or increased organic support. Based on previous contracting efforts and through comprehensive market research, any potential competitor would require three to five years of technical and SCM data in order to effectively compete and manage the program successfully. Without this level of data, competition has been determined not feasible. Therefore, the currently approved strategy will attempt to acquire this information. Three years after Tinker’s contract award, the USAF will make the decision to continue with the sole-source arrangement or to adjust the sustainment strategy based on what data was provided by P&W. This decision will be based on an assessment of the level of data obtained and how it addresses the requirements of needed historical F-117 usage. The decision point is at the three year point of the five year basic in order to give time to develop and execute a new contracting effort if required.

Recommendation 4. We recommend that the Director, Contracting Directorate, Air Force Life Cycle Management Center perform a quality review of Air Force Life Cycle Management Center contracting officials’ compliance with Federal and Defense acquisition regulations for commerciality determinations and, based on that review, consider corrective actions as appropriate.

Response 4. Concur with Intent

In order to ensure compliance both within AFLCMC and across the other Centers within AFMC, the Contracting Director of AFMC will perform a review of Center contracting officials’ compliance with Federal and Defense acquisition regulations for commerciality determinations, weaknesses and, based on that review, consider corrective actions as appropriate. Additionally, the Contracting Director of AFMC will review internal control concerns addressed in this report and, based on that review, consider corrective action as appropriate.
Acronyms and Abbreviations

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<td>Air Force Base</td>
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<td>DFARS</td>
<td>Defense Federal Acquisition Regulation Supplement</td>
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Whistleblower Protection
U.S. Department of Defense

The Whistleblower Protection Enhancement Act of 2012 requires the Inspector General to designate a Whistleblower Protection Ombudsman to educate agency employees about prohibitions on retaliation, and rights and remedies against retaliation for protected disclosures. The designated ombudsman is the DoD Hotline Director. For more information on your rights and remedies against retaliation, visit www.dodig.mil/programs/whistleblower.

For more information about DoD IG reports or activities, please contact us:

Congressional Liaison
congressional@dodig.mil; 703.604.8324

Media Contact
public.affairs@dodig.mil; 703.604.8324

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