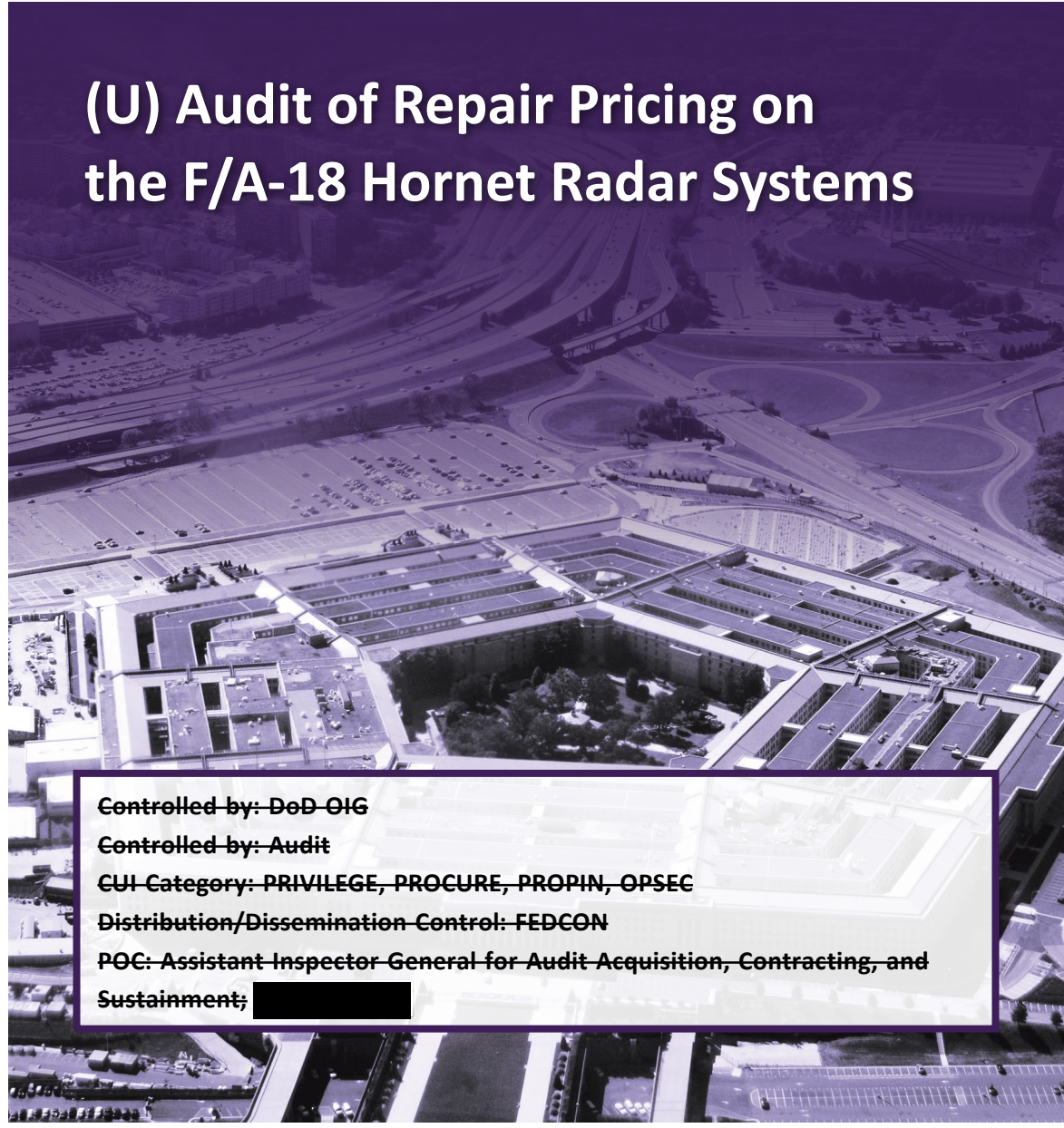


CUI

# INSPECTOR GENERAL

*U.S. Department of Defense*

AUGUST 21, 2024



## (U) Audit of Repair Pricing on the F/A-18 Hornet Radar Systems

**Controlled by: DoD-OIG**

**Controlled by: Audit**

**CUI Category: PRIVILEGE, PROCURE, PROPIN, OPSEC**

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**POC: Assistant Inspector General for Audit Acquisition, Contracting, and Sustainment; [REDACTED]**

INDEPENDENCE ★ INTEGRITY ★ EXCELLENCE ★ TRANSPARENCY

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# (U) Results in Brief

## (U) Audit of Repair Pricing on the F/A-18 Hornet Radar Systems

August 21, 2024

### (U) Objective

(U) The objective of this audit was to determine whether the Department of the Navy (DON) obtained fair and reasonable pricing for repair of Airborne Fire Control Radar Systems on the F/A-18 Hornet.

### (U) Background

(U) The DoD Hotline received allegations that the DON was overpaying Raytheon Technologies Corporation (Raytheon), an aerospace and defense company, and Vertex Modernization and Sustainment LLC (Vertex M&S) for repair of Airborne Fire Control Radar Systems including the AN/APG-65 and AN/APG-73 on the F/A-18 Hornet. AN/APG-65 and AN/APG-73 are designations for a family of all-weather, multimode airborne radar systems for the F/A-18 Hornet and used on a variety of other fighter aircraft types.

(U) Raytheon started repairing AN/APG-65 and AN/APG-73 radars on the F/A-18 Hornet in 1998. In December 2021, Vertex Aerospace LLC acquired the Global Training and Logistics, Mission Modernization Solutions, and Technology and Tolling Solutions businesses from Raytheon. In July 2022, Vertex Aerospace LLC merged with Vectrus Systems Corporation and rebranded as V2X Incorporated. Vertex M&S, a subsidiary of V2X Incorporated, is currently the only approved source to provide repair of the AN/APG-65 and AN/APG-73.

### (U) Finding

(U) The DON did not obtain fair and reasonable pricing for repair of the AN/APG-65 and AN/APG-73 radars on the F/A-18 Hornet. While Naval Supply Systems Command Weapon Systems Support (NAVSUP WSS) followed Federal Acquisition Regulation (FAR) price reasonableness determination requirements, it only obtained fair and reasonable prices for repair of 100 of 211 parts (47 percent), totaling \$12.02 million, and did not obtain fair and reasonable prices for repair of 111 of the 211 parts (53 percent), totaling \$32.92 million, on five definitized delivery orders. This occurred because NAVSUP WSS did not identify fluctuations in definitized touch costs compared to actual touch costs on a Contract Line Item Number (CLIN) level, and allowed inconsistent allocation of the support costs across the delivery orders by Vertex M&S. Touch costs are costs that are easily traceable to an individual item such as direct labor of the workers who touch the product as it is being repaired, and CLINs are part of DoD contracts and break the contract down by the individual items being procured. As a result, NAVSUP WSS paid at least \$3.93 million in excess of fair and reasonable prices for repair of 211 parts.

### (U) Recommendations

(U) Among other recommendations, we recommend that the Commander, NAVSUP WSS direct NAVSUP WSS contracting officials: (1) to determine whether payments above actual costs were made on the five delivery orders and implement available options to seek recovery, including voluntary refunds of at least \$3.93 million; and (2) identify and implement a methodology for consistently allocating the support costs across the repair CLINs and require the contractor to use the consistent methodology.



# (U) Results in Brief

## *(U) Audit of Repair Pricing on the F/A-18 Hornet Radar Systems*

### **(U) Management Comments and Our Response**

(U) The Chief Logistician-Aviation, NAVSUP WSS, responding for the Commander, NAVSUP WSS, agreed with two recommendations and disagreed with two recommendations. Although the Chief Logistician disagreed with one recommendation, they identified activities that met the intent of the recommendation. Therefore, three recommendations are resolved but will remain open, and we request additional comments on the unresolved recommendation within 30 days. Please see the Recommendations Table on the next page for the status of recommendations.



**(U) Recommendations Table**

<b>(U)</b> <b>Management</b>	<b>Recommendations Unresolved</b>	<b>Recommendations Resolved</b>	<b>Recommendations Closed</b>
Naval Supply Systems Command Weapon Systems Support	1.a	1.b, 1.c, and 1.d	None  <b>(U)</b>

(U) Please provide Management Comments by September 20, 2024.

**(U) Note:** The following categories are used to describe agency management’s comments to individual recommendations.

- **(U) Unresolved** – Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **(U) Resolved** – Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **(U) Closed** – The DoD OIG verified that the agreed upon corrective actions were implemented.





**OFFICE OF INSPECTOR GENERAL**  
**DEPARTMENT OF DEFENSE**  
4800 MARK CENTER DRIVE  
ALEXANDRIA, VIRGINIA 22350-1500

August 21, 2024

MEMORANDUM FOR AUDITOR GENERAL, DEPARTMENT OF THE NAVY

SUBJECT: (U) Audit of Repair Pricing on the F/A-18 Hornet Radar Systems  
(Report No. DODIG-2024-122)

(U) This final report provides the results of the DoD Office of Inspector General's audit. We previously provided copies of the draft report and requested written comments on the recommendations. We considered management's comments on the draft report when preparing the final report. These comments are included in the report.

(U) This report contains a recommendation that is considered unresolved because the Chief Logistician-Aviation, NAVSUP WSS, responding for the Commander, Naval Supply Systems Command Weapon Systems Support, did not agree with the recommendation presented in the report. Therefore, the recommendation remains open. We will track this recommendation until management has agreed to take actions that we determine to be sufficient to meet the intent of the recommendation and management officials submit adequate documentation showing that all agreed-upon actions are completed.

(U) DoD Instruction 7650.03 requires that recommendations be resolved promptly. Therefore, please provide us within 30 days your response concerning specific actions in process or alternative corrective actions proposed on the recommendation. Send your response to [audclev@dodig.mil](mailto:audclev@dodig.mil).

(U) We appreciate the cooperation and assistance received during the audit. If you have any questions please contact me at [REDACTED].

FOR THE INSPECTOR GENERAL:

A handwritten signature in black ink, appearing to read "Carmen J. Malone".

Carmen J. Malone  
Assistant Inspector General for Audit  
Acquisition, Contracting, and Sustainment



# (U) Contents

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## (U) Introduction

(U) Objective .....	1
(U) Background .....	1

## (U) Finding. NAVSUP WSS Did Not Always Obtain Fair and Reasonable Prices for Radar Repair .....

(U) NAVSUP WSS Followed the FAR Requirements but Did Not Always Obtain Fair and Reasonable Pricing on the Definitized Delivery Orders .....	5
(U) NAVSUP WSS Did Not Identify Cost Fluctuations and Allowed Inconsistent Support Cost Allocation .....	9
(U) NAVSUP WSS Overpaid for Part Repair .....	14
(U) Management Comments on the Finding and Our Response .....	16
(U) Recommendations, Management Comments, and Our Response .....	18

## Appendixes

(U) Appendix A. Scope and Methodology .....	23
(U) Universe and Sample of AN/APG-65 and AN/APG-73 Systems Repair Contracts .....	23
(U) Internal Control Assessment and Compliance .....	27
(U) Use of Computer-Processed Data .....	27
(U) Use of Technical Assistance .....	27
(U) Prior Coverage .....	28
(U) Appendix B. DoD Hotline Allegation .....	29
(U) Appendix C. Potential Monetary Benefits .....	30
(U) Appendix D. Fair and Reasonable Price Determinations .....	31

## (U) Management Comments

(U) Naval Supply Systems Command Weapon Systems Support .....	33
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## (U) Acronyms and Abbreviations .....

## (U) Introduction

### (U) Objective

(U) The objective of this audit was to determine whether the Department of the Navy (DON) obtained fair and reasonable pricing for repair of Airborne Fire Control Radar Systems on the F/A-18 Hornet. See Appendix A for a discussion of the scope and methodology and prior audit coverage related to the audit objective.<sup>1</sup>

### (U) Background

(U) The DoD Hotline received allegations that the DON was overpaying Raytheon Technologies Corporation (Raytheon), an aerospace and defense company, and Vertex Modernization and Sustainment LLC (Vertex M&S) for repair of the Airborne Fire Control Radar Systems including the AN/APG-65 and AN/APG-73 on the F/A-18 Hornet. Vertex M&S provides aviation lifecycle support, including design, engineering, and manufacturing services for the aerospace and defense industries. See Appendix B for the DoD Hotline details.

~~(CUI)~~ The F/A-18 & EA-18G Program Office (PMA-265) is aligned under the Naval Air Systems Command. PMA-265 is responsible for providing total life cycle support management by acquiring, delivering, and sustaining the F/A-18 Hornet and EA-18G Growler weapon systems. The F/A-18 Hornet is an all-weather fighter and attack aircraft that first took flight in 1978. The DON and multiple military partners around the world use the F/A-18 Hornet. As of April 2024, the DON had a total of [REDACTED] F/A-18 Hornets. Figure 1 shows an F/A-18 Hornet.



<sup>1</sup> (U) This report contains information that has been redacted because it was identified by the Department of Defense and contractor as controlled unclassified information (CUI) that is not releasable outside the Executive Branch. CUI is Government-created or owned unclassified information that allows for, or requires, safeguarding and dissemination controls in accordance with laws, regulations, or government-wide policies.

(U) The F/A-18 Hornet was fitted with the AN/APG-65 and AN/APG-73 Airborne Fire Control Radar Systems. AN/APG-65 and AN/APG-73 are designations for a family of all-weather, multimode airborne radar systems for the F/A-18 Hornet which are also used on a variety of other fighter aircraft types. The AN/APG-73 radar is an upgrade of the AN/APG-65 radar and provides higher throughputs, greater memory capacity, improved reliability, and easier maintenance without associated increases in size or weight.

(~~CUI~~) The DON plans to upgrade [REDACTED] F/A-18 Hornets to the APG-79 Active Electronically Scanned Array (AESA). According to a PMA-265 official, the upgrade is planned to be completed by FY 2027. The upgrade to the APG-79 AESA radar is designed to improve the weapon system's threat detection range, high-resolution synthetic aperture radar ground mapping and targeting capability, aircraft survivability, and situational awareness. See Table 1 for a list of the DON's F/A-18 Hornet fleet by radar configuration.

(U) Table 1. DON F/A-18 Hornet Fleet by Radar Configuration

( <del>CUI</del> ) Radar Configuration	Quantity of Navy Aircraft	Quantity of Marine Corps Aircraft	Total DON Aircraft
AN/APG-65	[REDACTED]	[REDACTED]	[REDACTED]
AN/APG-73	[REDACTED]	[REDACTED]	[REDACTED]
APG-79 AESA	[REDACTED]	[REDACTED]	[REDACTED]
No Radar Installed	[REDACTED]	[REDACTED]	[REDACTED]
<b>Total</b>	[REDACTED]	[REDACTED]	[REDACTED] ( <del>CUI</del> )

(U) Source: PMA-265.

### (U) Radar Systems Repair

(U) Raytheon started repairing the AN/APG-65 and AN/APG-73 radars on the F/A-18 Hornet in 1998. On January 25, 2018, Naval Supply Systems Command Weapon Systems Support (NAVSUP WSS) in Philadelphia, Pennsylvania, awarded sole-source Basic Ordering Agreement (BOA) N00383-18-G-N701 to Raytheon in Indianapolis, Indiana, for repair of the AN/APG-65 and AN/APG-73 from January 25, 2018, through January 25, 2023. NAVSUP WSS provides program and supply support to the DON, Marine Corps, and Joint and Allied Forces. According to NAVSUP WSS officials, NAVSUP WSS is still using BOA N00383-18-G-N701 for repairs and plans to award a new BOA during the last quarter of FY 2024.



(U) The BOA requires Raytheon to furnish all efforts, including labor, material, parts, and facilities to repair or modify the ordered quantities of repairable parts. The BOA allows priced orders and undefinitized contract actions to be placed under the BOA. A priced order is one in which all terms and conditions have been agreed upon before the order is issued. Additionally, the BOA allows two types of undefinitized contract actions: (1) ceiling priced orders, and (2) monetary limitation orders. A ceiling priced order is one in which all terms and conditions have not been agreed to at the time of issuance of the order. Each order includes an agreed-to not-to-exceed ceiling price and includes a requirement for NAVSUP WSS to definitize the order within 180 days after issuance of the order. Monetary limitation orders are under \$150,000 and are subject to adjustment when the fixed price is established. Definitization means the Government and contractor have agreed on contract terms, specifications, and price. NAVSUP WSS can extend the definitization date up to 180 days after the contractor submits a proposal.

(U) In December 2021, Vertex Aerospace LLC acquired the Global Training and Logistics, Mission Modernization Solutions, and Technology and Tolling Solutions businesses from Raytheon. According to Vertex M&S officials, the acquisition included the repair contracts for the AN/APG-65 and AN/APG-73 radars. In July 2022, Vertex Aerospace LLC merged with Vectrus Systems Corporation and rebranded as V2X Incorporated. V2X Incorporated includes Vertex M&S as a subsidiary. Vertex M&S is currently completing the repair work in Indianapolis, Indiana, and is the only approved source to provide repair of the AN/APG-65 and AN/APG-73. The radar repair does not involve commercial items.

(U) NAVSUP WSS had the Defense Contract Audit Agency (DCAA) conduct proposal audits on orders for repair of the AN/APG-65 and AN/APG-73 radars on the F/A-18 Hornet. The DCAA provides audit and financial advisory services to the DoD and other Federal entities responsible for acquisition and contract administration. In addition, NAVSUP WSS designated contract administration to the Defense Contract Management Agency (DCMA). The DCMA provides contract administration services for the DoD and ensures that DoD supplies and services meet all performance requirements and are delivered on time and at projected cost.

### ***(U) Cost and Pricing Guidance***

(U) The Federal Acquisition Regulation (FAR) requires that contracting officers review contractors' proposed prices to ensure that prices are fair and reasonable.<sup>2</sup> Contracting officers must obtain certified cost and pricing data for delivery orders over \$2 million, unless an exception applies.<sup>3</sup> Certified cost and pricing data is data that the contractors certify as accurate, complete, and current before submission to the contracting officer. Exceptions for obtaining certified cost and pricing data are allowable when the contracting officer determines that adequate price competition exists, the price is set by law or regulation, the items are commercial, or a waiver is granted.<sup>4</sup> Contracting officers can obtain other than certified cost or pricing data for contracts that do not require certified cost or pricing data or when an exception to requesting certified cost or pricing data exists.<sup>5</sup> Data other than certified cost or pricing data is pricing data, cost data, and judgmental information necessary for the contracting officer to determine a fair and reasonable price.<sup>6</sup>

### ***(U) Review of Sample Parts***

(U) The BOA includes a list of 94 unique parts that could be repaired. From February 13, 2018, to September 22, 2022, NAVSUP WSS awarded 15 delivery orders for the repair of 71 unique parts, totaling \$194.17 million. The delivery orders range in total cost from \$0.15 million to \$57.26 million. We selected a nonstatistical sample of 7 unique parts, with a total ordered quantity of 473 parts, totaling \$137.05 million to conduct a cost analysis. NAVSUP WSS ordered repair of the seven parts on eight delivery orders. NAVSUP WSS definitized five of the eight delivery orders. As of April 30, 2024, NAVSUP WSS was still in the process of definitizing the remaining three delivery orders. See Table 4 in Appendix A for a listing of the total quantity of the parts purchased on the eight delivery orders.

<sup>2</sup> (U) FAR Part 15, "Contracting By Negotiation," Subpart 15.4, "Contract Pricing," Section 15.404, "Proposal Analysis," Subsection 15.404-1, "Proposal analysis techniques."

<sup>3</sup> (U) FAR Part 15, "Contracting by Negotiation," Subpart 15.4, "Contract Pricing," Section 15.403, "Obtaining certified cost or pricing data," Subsection 15.403-4, "Requiring certified cost or pricing data."

<sup>4</sup> (U) FAR Part 15, "Contracting by Negotiation," Subpart 15.4, "Contract Pricing," Section 15.403, "Obtaining certified cost or pricing data," Subsection 15.403-1, "Prohibition on obtaining certified cost or pricing data."

<sup>5</sup> (U) FAR Part 15, "Contracting by Negotiation," Subpart 15.4, "Contract Pricing," Section 15.403, "Obtaining certified cost or pricing data," Subsection 15.403-3, "Requiring data other than certified cost or pricing data."

<sup>6</sup> (U) FAR Part 2, "Definitions of Words and Terms."

## (U) Finding

### (U) NAVSUP WSS Did Not Always Obtain Fair and Reasonable Prices for Radar Repair

(U) The DON did not obtain fair and reasonable pricing for repair of the AN/APG-65 and AN/APG-73 radars on the F/A-18 Hornet. While NAVSUP WSS followed the FAR price reasonableness determination requirements, it only obtained fair and reasonable prices for repair of 100 of 211 parts (47 percent), totaling \$12.02 million, and did not obtain fair and reasonable prices for repair of 111 of the 211 parts (53 percent), totaling \$32.92 million, on five definitized delivery orders. This occurred because NAVSUP WSS did not identify fluctuations in definitized touch costs compared to actual touch costs on a Contract Line Item Number (CLIN) level and allowed inconsistent allocation of the support costs across the delivery orders by Vertex M&S.<sup>7</sup> As a result, NAVSUP WSS paid at least \$3.93 million in excess for repair of 211 parts and may have paid in excess of fair and reasonable prices for support costs on five definitized delivery orders. (See Appendix C for details on potential monetary benefits.)

### (U) NAVSUP WSS Followed the FAR Requirements but Did Not Always Obtain Fair and Reasonable Pricing on the Definitized Delivery Orders

(U) The DON did not obtain fair and reasonable pricing for repair of the AN/APG-65 and AN/APG-73 radars on the F/A-18 Hornet. While NAVSUP WSS followed the FAR price reasonableness determination requirements, it only obtained fair and reasonable prices for repair of 100 of 211 parts (47 percent), totaling \$12.02 million, and did not obtain fair and reasonable prices for repair of 111 of the 211 parts (53 percent), totaling \$32.92 million, on five definitized delivery orders.

<sup>7</sup> (U) Touch costs are costs that are easily traceable to an individual item such as direct labor of the workers who touch the product as its being repaired. CLINs are part of DoD contracts and break the contract down by the individual items being procured.



### ***(U) NAVSUP WSS Followed the FAR Price Reasonableness Determination Requirements***

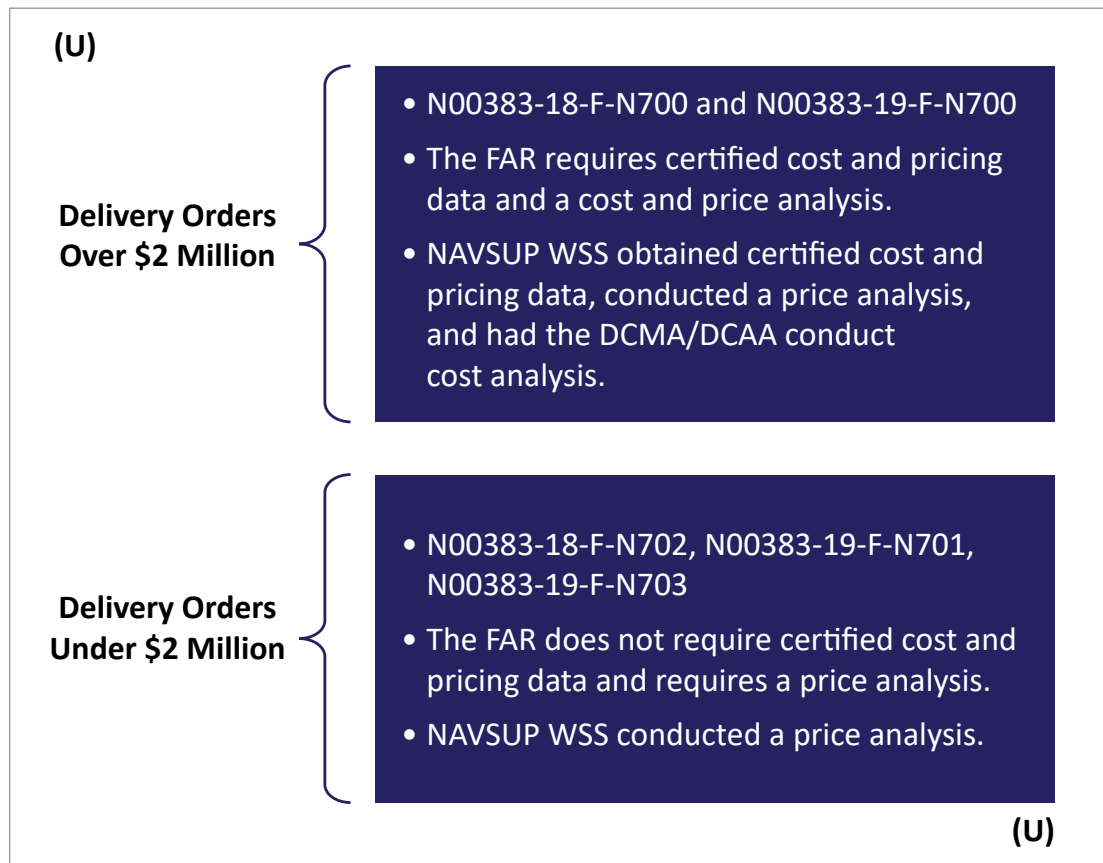
(U) NAVSUP WSS followed the FAR price reasonableness determination requirements and concluded that prices were fair and reasonable for 211 parts, on the five definitized delivery orders. Two of the five definitized orders were over \$2 million (N00383-18-F-N700 and N00383-19-F-N700). The FAR requires contracting officers to obtain certified cost and pricing data for delivery orders over \$2 million, conduct a cost analysis to evaluate individual cost elements, and conduct a price analysis to verify that the overall price offered is fair and reasonable.<sup>8</sup>

- (U) For delivery order N00383-18-F-N700, NAVSUP WSS obtained certified cost and pricing data. Raytheon extended pricing from a previous delivery order for the same parts in its proposal for delivery order N00383-18-F-N700. NAVSUP WSS obtained Raytheon's total actual costs incurred, total number of assets shipped, profit range on previous orders, and work in progress from the previous delivery order. NAVSUP WSS conducted a price analysis using the actual costs and determined that the pricing on N00383-18-F-N700 was fair and reasonable. Additionally, NAVSUP WSS requested that the DCAA complete a cost analysis. The DCAA conducted audits on three different proposals related to delivery orders under the FY 2014 BOA. The DCAA determined that the proposed direct material costs and direct labor hours materially comply with contract terms for two of the three proposals. For the remaining proposal, the DCAA questioned direct labor and material costs because historical hours differed from the proposed amounts and recent comparable purchase history differed from the proposal amounts. NAVSUP WSS also requested that the DCMA conduct a technical review. The DCMA determined that most of the direct material kinds and counts were reasonable.
- (U) For delivery order N00383-19-F-N700, Raytheon escalated the extended pricing from the previously definitized delivery orders. NAVSUP WSS obtained certified cost and pricing data and conducted a price analysis. NAVSUP WSS reviewed actual costs incurred on delivery orders under the FY 2014 BOA that were definitized in FY 2016 and FY 2018. Additionally, NAVSUP WSS agreed to use the negotiated prices that DCAA and DCMA had completed cost analysis on previously.

<sup>8</sup> (U) FAR Part 15, "Contracting by Negotiation," Subpart 15.4, "Contract Pricing," Section 15.403, "Obtaining certified cost or pricing data," Subsection 15.403-4, "Requiring certified cost or pricing data" and Section 15.404, "Proposal analysis," Subsection 15.404-1(c), "Cost analysis."

(U) The remaining three of the five definitized orders were under \$2 million (N00383-18-F-N702, N00383-19-F-N701, and N00383-19-F-N703) and therefore, did not require certified cost or pricing data. When certified cost or pricing data are not required, contracting officers must conduct a price analysis.<sup>9</sup> NAVSUP WSS conducted a price analysis on the three delivery orders. The delivery orders were sole-sourced to the contractor. Therefore, NAVSUP WSS could not compare competitive offers to determine price reasonableness. NAVSUP WSS instead compared proposed prices to historical actual prices on the previous radar repair delivery orders, in accordance with the FAR.<sup>10</sup> See Figure 2 for a summary of the five definitized delivery orders, FAR requirements, and NAVSUP WSS actions.

(U) Figure 2. Summary of FAR Requirements and NAVSUP WSS Actions



(U) Source: The DoD OIG.

<sup>9</sup> (U) FAR Part 15, "Contracting by Negotiation," Subpart 15.4, "Contract Pricing," Section 15.404, "Proposal analysis," Subsection 15.404-1, "Proposal analysis techniques."

<sup>10</sup> (U) FAR Part 15, "Contracting by Negotiation," Subpart 15.4, "Contract Pricing," Section 15.404, "Proposal analysis," Subsection 15.404-1(b), "Price analysis."

### ***(U) NAVSUP WSS Obtained Fair and Reasonable Prices for Repair of Some Parts***

(U) NAVSUP WSS obtained fair and reasonable prices for repair of 100 of 211 parts (47 percent), totaling \$12.02 million. Specifically, NAVSUP WSS received a fair and reasonable price for:

- (U) 18 radar transmitter assemblies (part number 3525011-150), totaling \$2.18 million across two delivery orders;
- (U) 21 power supply amplifiers (part number 8655302), totaling \$1.55 million across two delivery orders;
- (U) 57 radio receivers (part number 8655467/8655467-1), totaling \$7.16 million on three delivery orders; and
- ~~(CUI)~~ 4 circuit card assemblies (part number 5097670), totaling [REDACTED] on one delivery order.

~~(CUI)~~ For example, NAVSUP WSS received a fair and reasonable price for repair of 18 radar transmitter assemblies on delivery orders N00383-18-F-N700 and N00383-19-F-N700. NAVSUP WSS definitized the touch cost of [REDACTED] for repair of the 18 radar transmitters on the two delivery orders. We identified actual touch costs of [REDACTED], resulting in a payment of approximately [REDACTED] below a fair and reasonable price.

### ***(U) NAVSUP WSS Did Not Obtain Fair and Reasonable Prices for Repair of Some Parts***

(U) NAVSUP WSS did not obtain fair and reasonable prices for repair of 111 of 211 parts (53 percent), totaling \$32.92 million, ordered on three delivery orders. While NAVSUP WSS reviews the basis of estimate for total labor and material costs from each proposal, looking for outliers from actual costs in the previous year, we reviewed prices on a CLIN level to identify differences between what was definitized and the actual contractor costs. See Appendix D for a list of fair and reasonable determinations for repair of the parts.

~~(CUI)~~ NAVSUP WSS and Vertex M&S definitized the touch costs at [REDACTED] for repair of 111 parts. We identified actual touch costs of [REDACTED] for those parts. We compared the definitized touch costs to the actual touch costs to determine if NAVSUP WSS obtained a fair and reasonable price, resulting in payments of approximately [REDACTED] above a fair and reasonable price. For repair of the 111 parts, the fair and reasonable price differences ranged from [REDACTED] on individual delivery orders.

(~~CUI~~) For example, NAVSUP WSS ordered repair of 11 radar receivers (part number 3525026-110), totaling \$14.17 million on delivery orders N00383-18-F-N700 and N00383-19-F-N700. NAVSUP WSS definitized the touch cost of [REDACTED] for repair of 11 radar receivers on the two delivery orders. We identified actual touch costs of [REDACTED], resulting in payments of [REDACTED] above a fair and reasonable price on the two delivery orders. Figure 3 shows a radar receiver.



(U) Figure 3. Radar Receiver  
(U) Source: Vertex M&S.

### **(U) NAVSUP WSS Did Not Identify Cost Fluctuations and Allowed Inconsistent Support Cost Allocation**

(U) NAVSUP WSS did not identify fluctuations in definitized touch costs compared to actual touch costs on a CLIN level and allowed inconsistent allocation of the support costs across the delivery orders by Vertex M&S.

#### ***(U) NAVSUP WSS Did Not Analyze Touch Costs at a CLIN Level***

(U) NAVSUP WSS did not identify fluctuations in definitized touch costs compared to actual touch costs on a CLIN level. NAVSUP WSS officials explained that they do not review the touch costs on a per-CLIN basis. Instead, NAVSUP WSS generally reviews the basis of estimate for total labor and material costs from each proposal, looking for outliers from actual costs in the previous year. NAVSUP WSS officials explained that they review more extensive data if more is available and tailor the amount of supporting data needed to each cost analysis and negotiation as necessary.

(U) The Defense Federal Acquisition Regulation Supplement (DFARS) states that contracting officers shall not determine the price of a contract to be fair and reasonable based solely on historical prices paid by the Government.<sup>11</sup>

~~(U)~~ According to NAVSUP WSS officials, there is uncertainty with repairs because the contractor does not know the level of repair each part will need when drafting the proposal. Vertex M&S officials confirmed that differences occur between what was definitized for touch costs and what is actually incurred, for a variety of reasons. Vertex M&S officials explained that the [REDACTED]

~~(U)~~ We identified differences between definitized and actual touch costs of [REDACTED]. To identify differences, we requested Vertex M&S provide detailed actual costs of repair for each CLIN on the delivery orders. This data included a [REDACTED]. The FAR allows contracting officers to request other than certified cost or pricing data necessary to determine a fair and reasonable price; therefore, the contracting officer could request the same information that we requested.<sup>12</sup>

*(U) The actual touch costs were lower than the definitized touch costs for repair of 111 of the 211 parts, resulting in payments in excess of fair and reasonable prices.*

In addition, there is extensive historical cost data readily available for this contract because repair of the F/A-18 radars has been occurring for over 25 years. The actual touch costs were lower than the definitized touch costs for repair of 111 of the 211 parts, resulting

in payments in excess of fair and reasonable prices. Additionally, NAVSUP WSS paid [REDACTED] in extra profit on the additional touch costs. DFARS allows the Government to request a voluntary refund from a contractor.<sup>13</sup> The Commander, NAVSUP WSS, should direct NAVSUP WSS contracting officials to assess and determine whether payments above actual costs were made on the five definitized delivery orders and implement available options to seek recovery, including voluntary refunds of at least \$3.93 million, in accordance with Defense regulations.

<sup>11</sup> (U) DFARS 215.403-3, "Requiring data other than certified cost or pricing data."

<sup>12</sup> (U) FAR Part 2, "Definitions of Words and Terms," for "Other Than Certified Cost and Pricing Data" and FAR Part 15, "Contracting by Negotiation," Subpart 15.4, "Contract Pricing," Section 15.403, "Obtaining certified cost or pricing data," 15.403-3, "Requiring data other than certified cost or pricing data."

<sup>13</sup> (U) DFARS 242.71, "Voluntary Refunds."

(U) Additionally, it is important for NAVSUP WSS to review actual touch costs on a per-CLINs basis because it is in the process of determining fair and reasonable pricing on three undefinitized delivery orders for repair of 262 parts, totaling \$92.11 million. NAVSUP WSS did not definitize the three delivery orders in a timely manner because Vertex M&S consistently missed due dates for providing compliant proposals. The delivery orders are over \$2 million and require certified cost and pricing data. NAVSUP WSS explained that the three delivery orders are in various stages of negotiation.

- (U) N00383-20-F-N700. NAVSUP WSS officials stated that they received a firm-fixed-price proposal from Vertex M&S and certified cost and pricing data. NAVSUP WSS requested that the DCAA conduct an audit of the proposal. DCAA officials were unable to obtain enough information from Vertex M&S to complete the audit and issued a Disclaimer of Opinion to NAVSUP WSS in May 2024.
- (U) N00383-21-F-N700. NAVSUP WSS officials stated that Vertex M&S has not provided a firm-fixed-price proposal to initiate negotiations. NAVSUP WSS officials stated that Vertex M&S is still obtaining supplier material quotes and that its management is aware of the delays to definitize the delivery orders.
- (U) N00383-22-F-N702. NAVSUP WSS officials stated that they received a firm-fixed-price proposal from Vertex M&S and certified cost and pricing data. NAVSUP WSS requested a DCAA audit and DCMA pricing review on the proposal for delivery order N00383-22-F-N702. DCAA officials issued a report in December 2022 that questioned \$1.8 million in costs, including direct labor and material costs. The report cited a scope limitation pending receipt of the DCMA technical report. In 2023, DCMA officials issued a report that took exception to proposed material and quantities because of questionable and unsubstantiated data. DCAA issued a supplemental report in April 2024 that increased the questioned costs to \$8.6 million, primarily because of recommended reductions to proposed material quantities and labor hours contained in the DCMA technical audit findings. The NAVSUP WSS official requested that the “Price Fighters” review the proposal. The Price Fighters are a division aligned under NAVSUP WSS that provides cost and price analysis support to the acquisition business management community throughout the DON, DoD, and civilian Federal agencies. According to NAVSUP WSS, the Price Fighters’ review is ongoing and Vertex M&S is responding to requests for information.



(U) Repair of the AN/APG-65 and AN/APG-73 radars is a sole-source environment, meaning the DON does not own the rights to use the data needed to purchase the radar parts from another source. The only method available to repair the parts is by the manufacturer. NAVSUP WSS officials stated that it is difficult to penalize Raytheon and Vertex M&S because of the sole-source environment. NAVSUP WSS officials explained that Vertex M&S consistently missed due dates for providing compliant proposals, which led to delays in definitizing the delivery orders. NAVSUP WSS officials stated that they elevated the delays in definitizing the delivery orders through their management and discussed the late proposals with Vertex M&S in bimonthly meetings. NAVSUP WSS officials explained that in order to sustain the AN/APG-65 and AN/APG-73 radars, they need the repairs completed, and issuing undefinitized contract actions allows Vertex M&S to start the work despite delays in obtaining compliant proposals.

(U) NAVSUP WSS officials stated that unilaterally definitizing the contracts is inadvisable because Raytheon and Vertex M&S can then litigate and not perform the necessary radar repairs. Additionally, NAVSUP WSS officials stated that they could withhold progress payments from Vertex M&S until Vertex M&S submits compliant proposals, but this would harm the supplier relationship so they did not do this for the three delivery orders. NAVSUP WSS officials stated that they would rather keep the supplier relationship intact because they need Vertex M&S to perform as the only source of supply. NAVSUP WSS officials explained the way to solve the delays in definitizing is to forecast 3 to 5 years in advance and set up long term contracts. NAVSUP WSS officials stated that was never done for repair of the AN/APG-65 and AN/APG-73 radars and does not make sense to do now since those radars are rapidly being replaced with the APG-79 AESA radars. NAVSUP WSS established long-term contracts for the APG-79 AESA radar repair so that moving forward, delays in definitizing will not occur. However, it is imperative for NAVSUP WSS to establish fair and reasonable pricing that represents actual costs on those long-term contracts.

(U) According to DoD policy, undefinitized contract actions should be definitized by the earlier of 180 days after the contractor submits a qualifying proposal, or the date on which the amount of funds obligated under the contract is equal to or more than 50 percent of the not-to-exceed price.<sup>14</sup> Furthermore, the delivery orders include the requirement to definitize within 180 days of issuance of the order. NAVSUP WSS issued the three delivery orders in 2022 and has missed definitizing the delivery orders within the 180-day due dates. Therefore, the Commander, NAVSUP WSS, should direct NAVSUP WSS contracting officials to definitize the

<sup>14</sup> (U) DFARS Part 217, "Special Contracting Methods," Subpart 217.74, "Undefinitized Contract Actions," Section 217.7404-3, "Definitization Schedule."

(U) remaining delivery orders under BOA N00383-18-G-N701. However, NAVSUP WSS needs to obtain fair and reasonable prices for repair of AN/APG-65 and AN/APG-73 radars on the F/A-18 Hornet. NAVSUP WSS could benefit from analyzing the touch and support costs at a CLIN level to identify where actual costs are lower than what was proposed before definitizing the delivery orders. The Commander, NAVSUP WSS, should direct NAVSUP WSS contracting officials to conduct their fair and reasonable price determinations at CLIN levels to identify differences between actual costs and proposed costs before definitizing the remaining delivery orders.

**(U) NAVSUP WSS Did Not Consistently Apply Support Costs at a CLIN Level**

(~~CUI~~) NAVSUP WSS allowed the contractor to inconsistently allocate support costs across the delivery orders. Support costs such as factory overhead are not traceable to an individual item being repaired, but are needed to keep the operation running. Vertex M&S officials explained that [REDACTED]. NAVSUP WSS officials stated that they perform cost analysis on the support costs with input from the DCAA and DCMA. NAVSUP WSS officials stated that support costs were allocated in accordance with the contractors' approved accounting system, as well as to the mix of items on the individual delivery orders.

*(U) NAVSUP WSS allowed the contractor to inconsistently allocate support costs across the delivery orders.*

(~~CUI~~) Raytheon and Vertex M&S identified support costs as a [REDACTED] in the proposals and showed the breakout of various categories of support costs in their proposals. Vertex M&S allocated the [REDACTED] to each repair CLIN. According to a Vertex M&S official, NAVSUP WSS [REDACTED]. A NAVSUP WSS official stated it was their understanding that support costs were allocated in accordance with Vertex M&S's approved accounting system and allocated to the mix of items on individual delivery orders. Vertex M&S officials stated that they [REDACTED]. For example, Vertex M&S identified a [REDACTED] for support costs in its proposal for delivery order N00383-22-F-N702. Vertex M&S [REDACTED], applying from as low as [REDACTED] to as high as [REDACTED] of the total support costs [REDACTED]. The cost for the radar receivers (part number 3525026-110) on delivery order N00383-22-F-N702 was almost [REDACTED] and Vertex M&S allocated almost [REDACTED] of the total [REDACTED] in support costs to the CLIN.

(~~CUI~~) Vertex M&S officials explained that they [REDACTED]. Vertex M&S officials stated that they could not [REDACTED]. Therefore, we could not compare the actual support costs to the definitized support costs on each delivery order to identify differences. Consistent application of a support cost allocation methodology would result in unit prices accurately reflecting actual part repair cost and assist NAVSUP WSS in determining fair and reasonable prices. The Commander, NAVSUP WSS, should direct NAVSUP WSS contracting officials to identify and implement a methodology for consistently allocating the support costs across the repair CLINs and require the contractor to use the consistent methodology.

### (U) NAVSUP WSS Overpaid for Part Repair

(~~CUI~~) NAVSUP WSS paid at least \$3.93 million in excess of fair and reasonable prices for repair of 211 parts. NAVSUP WSS paid [REDACTED] in touch costs for repair of 211 parts; however, NAVSUP WSS could have paid [REDACTED] for those same parts had it obtained and analyzed other than certified cost or pricing data at a more detailed CLIN level. As a result, NAVSUP WSS paid a total of [REDACTED] more in touch costs than the contractors actually incurred. Additionally, NAVSUP WSS paid [REDACTED] in extra profit on the additional touch costs.

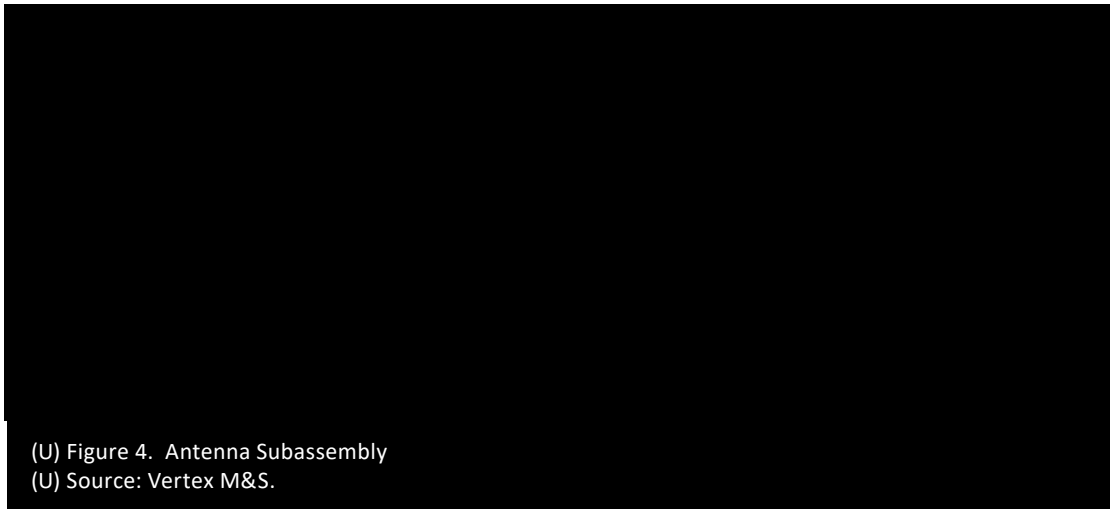
(~~CUI~~) For example, NAVSUP WSS paid approximately \$1.64 million in excess of fair and reasonable prices for repair of 64 antenna subassemblies (part number 3556900-25) on delivery orders N00383-18-F-N700 and N00383-19-F-N700. NAVSUP WSS agreed with Vertex M&S that the touch costs would be [REDACTED]. However, the actual touch costs were [REDACTED], resulting in an overpayment of [REDACTED]. Additionally, NAVSUP WSS paid [REDACTED] in extra profit on the additional touch costs. Figure 4 shows an antenna subassembly.

⋮ (U) NAVSUP WSS paid at least  
 ⋮ \$3.93 million in excess of fair and  
 ⋮ reasonable prices for repair of  
 ⋮ 211 parts.

repair of 211 parts; however, NAVSUP WSS could have paid [REDACTED] for those same parts had it obtained and analyzed other than certified cost or pricing data at a more detailed CLIN

level. As a result, NAVSUP WSS paid a total of [REDACTED] more in touch costs than the contractors actually incurred. Additionally, NAVSUP WSS paid [REDACTED] in extra profit on the additional touch costs.

(~~CUI~~) For example, NAVSUP WSS paid approximately \$1.64 million in excess of fair and reasonable prices for repair of 64 antenna subassemblies (part number 3556900-25) on delivery orders N00383-18-F-N700 and N00383-19-F-N700. NAVSUP WSS agreed with Vertex M&S that the touch costs would be [REDACTED]. However, the actual touch costs were [REDACTED], resulting in an overpayment of [REDACTED]. Additionally, NAVSUP WSS paid [REDACTED] in extra profit on the additional touch costs. Figure 4 shows an antenna subassembly.



(U) Figure 4. Antenna Subassembly  
(U) Source: Vertex M&S.

(~~CUI~~) NAVSUP WSS may have paid in excess of fair and reasonable prices for support costs on five definitized delivery orders. Raytheon and Vertex M&S identified support costs as a [REDACTED] in the proposals but [REDACTED] in the delivery orders. Furthermore, Raytheon and Vertex M&S capture [REDACTED]. Because there are multiple delivery orders in each fiscal year, it is difficult to compare the definitized CLIN amounts to actual incurred costs. NAVSUP WSS may overpay for support costs in excess of fair and reasonable prices if it does not establish consistent allocation of support costs across the repair CLINs.

(U) NAVSUP WSS may also overpay for repair of 262 parts on three undefinitized delivery orders. Of the 262 individual parts, totaling \$92.1 million ordered, NAVSUP WSS has repaired and delivered 116 parts across the three undefinitized delivery orders. NAVSUP WSS can only pay Vertex M&S progress payments because the three delivery orders are not definitized. NAVSUP WSS has paid a total of \$19.37 million on the three delivery orders. According to NAVSUP WSS officials, progress payments are not tied to the specific repairs of the parts. NAVSUP WSS will pay the negotiated prices once agreed upon prices are established with Vertex M&S. NAVSUP WSS may overpay for the repair of seven unique parts if it does not obtain fair and reasonable prices for repair of parts on the delivery orders.

## **(U) Management Comments on the Finding and Our Response**

### **(U) Chief Logistician–Aviation, Naval Supply Systems Command Weapon Systems Support Comments**

(U) The Chief Logistician–Aviation, NAVSUP WSS, responding for the Commander, Naval Supply Systems Command Weapon Systems Support, stated that our statement that NAVSUP WSS did not obtain fair and reasonable prices for repair of 111 of the 211 parts, totaling \$32.92 million, was a significant misrepresentation. The Chief Logistician stated that our analysis concluded there was a potential \$3.93 million overpayment of the total value of 7 sample parts across 5 different delivery orders but some of them had actual costs incurred higher than the negotiated firm-fixed prices and some had actual costs incurred lower than the negotiated firm-fixed prices. The Chief Logistician stated that the term “overpayment” indicates more has been paid than contractually agreed, and that was not the case in this circumstance.

(U) Additionally, the Chief Logistician stated that our analysis of actual touch costs incurred on previously negotiated firm-fixed-price contracts used information that was not available to the contracting officers during negotiations and conflicts with FAR 16.202. The Chief Logistician stated that FAR 16.202 describes a firm-fixed-price contract as providing for a price that is not subject to any adjustment on the basis of the contractor’s cost experience in performing the contract. The Chief Logistician stated that NAVSUP WSS uses actual costs-incurred data from firm-fixed-price contract performance to inform negotiation of future contracts.

(U) The Chief Logistician also stated that our report did not sufficiently explain Raytheon and Vertex M&S accounting system constraints or NAVSUP WSS’ due diligence spanning decades to allocate program support costs appropriately and negotiate fair and reasonable prices for the support costs on all Raytheon radar programs.

### **(U) Our Response**

(U) Our analysis identified that the actual touch costs were lower than the definitized touch costs for repair of 111 of the 211 parts, totaling \$32.92 million, resulting in payments in excess of fair and reasonable prices. As a result, NAVSUP WSS paid at least \$3.93 million in excess of fair and reasonable prices for repair of 211 parts on five definitized delivery orders. For repair of the 211 parts, the fair and reasonable price differences ranged from \$(179,293) to \$1.53 million. These fair and reasonable price differences resulted in a net of \$3.93 million in excess of fair and reasonable payments.

~~(CUI)~~ There is extensive historical cost data readily available for this contract because repair of the F/A-18 radars has been occurring for over 25 years. The Chief Logistician stated that NAVSUP WSS uses actual costs-incurred data from firm-fixed-price contract performance to inform negotiation of future contracts. However, NAVSUP WSS officials explained during the audit that they do not review the touch costs on a per-CLIN basis. Instead, NAVSUP WSS generally reviews the basis of estimate for total labor and material costs from each proposal, looking for outliers from actual costs in the previous year. The contracting officer could have requested CLIN-level data on prior delivery orders, as allowed by the FAR to determine fair and reasonable prices.<sup>15</sup> Specifically, we requested Vertex M&S provide detailed actual costs of repair for each CLIN on the delivery orders to identify differences between definitized and actual touch costs. This data included a [REDACTED] [REDACTED] and would have been available to the contracting officer if they would have requested the actual costs of repair for each CLIN on prior delivery orders before negotiating the current contract.

~~(CUI)~~ Our report discusses the Raytheon and Vertex M&S accounting system constraints and the challenges NAVSUP WSS encountered while negotiating fair and reasonable prices. Specifically, Vertex M&S officials explained that they [REDACTED] [REDACTED]. Vertex M&S officials stated that they could not [REDACTED] [REDACTED]. Therefore, we could not compare the actual support costs to the definitized support costs on each delivery order to identify differences. Additionally, our report discusses that NAVSUP WSS did not definitize the three delivery orders in a timely manner because Vertex M&S consistently missed due dates for providing compliant proposals. However, we were able to compare the actual touch costs to the definitized touch costs to determine whether the DON obtained fair and reasonable pricing for repair of Airborne Fire Control Radar Systems on the F/A-18 Hornet.

<sup>15</sup> (U) FAR Part 2, "Definitions of Words and Terms," for "Other Than Certified Cost and Pricing Data" and FAR Part 15, "Contracting by Negotiation," Subpart 15.4, "Contract Pricing," Section 15.403, "Obtaining certified cost or pricing data," 15.403-3, "Requiring data other than certified cost or pricing data."



## **(U) Recommendations, Management Comments, and Our Response**

### **(U) Recommendation 1**

**(U) We recommend that the Commander, Naval Supply Systems Command Weapon Systems Support, direct NAVSUP WSS contracting officials to:**

- a. (U) Assess and determine whether payments above actual costs were made on the five delivery orders and implement available options to seek recovery, including voluntary refunds of at least \$3.93 million, in accordance with Defense Federal Acquisition Regulation Supplement 242.71.**

### ***(U) Chief Logistician–Aviation, Naval Supply Systems Command Weapon Systems Support Comments***

(U) The Chief Logistician–Aviation, NAVSUP WSS, responding for the Commander, Naval Supply Systems Command Weapon Systems Support, disagreed, stating that NAVSUP WSS does not intend to retroactively analyze actual costs incurred on fully definitized firm-fixed-price contracts to seek voluntary refunds. The Chief Logistician stated that this situation does not meet the criteria of DFARS Procedures, Guidance, and Information 242.7100 (3)(i) and (ii). The Chief Logistician stated that FAR 16.202 describes a firm-fixed-price contract as providing for a price that is not subject to any adjustment on the basis of the contractor’s cost experience in performing the contract and places maximum incentive for the contractor to control costs and perform effectively. The Chief Logistician stated that we should never expect the contract specialist’s negotiated costs prior to contract performance to match the actual costs incurred after contract performance. The Chief Logistician stated that the disconnect between negotiated and actual incurred costs under a firm-fixed-price contract is not an indicator of the contract specialist’s inability to obtain fair and reasonable prices, nor a signal that a voluntary refund should be considered.

### ***(U) Our Response***

(U) Comments from the Chief Logistician–Aviation, NAVSUP WSS did not address the recommendation; therefore, the recommendation is unresolved. The FAR requires that contracting officers obtain fair and reasonable prices.<sup>16</sup> While NAVSUP WSS followed the FAR price reasonableness determination requirements, it only obtained fair and reasonable prices for repair of 100 of 211 parts (47 percent), totaling \$12.02 million, and did not obtain fair and reasonable prices for repair of 111 of the 211 parts (53 percent), totaling \$32.92 million, on five definitized delivery orders.

<sup>16</sup> (U) FAR Part 15, “Contracting By Negotiation,” Subpart 15.4, “Contract Pricing,” Section 15.404, “Proposal Analysis,” Subsection 15.404-1, “Proposal analysis techniques.”

(~~CUI~~) The FAR allows contracting officers to request other than certified cost or pricing data necessary to determine a fair and reasonable price; therefore, the contracting officer could request CLIN-level data on prior delivery orders.<sup>17</sup> We requested that Vertex M&S provide detailed actual costs of repair for each CLIN on the delivery orders to identify differences between definitized and actual touch costs. This data included a [REDACTED]. In addition, there was extensive historical cost data readily available at the time of negotiation for this contract because repair of the F/A-18 radars has been occurring for over 25 years. The actual touch costs were lower than the definitized touch costs for repair of 111 of the 211 parts, resulting in payments in excess of fair and reasonable prices.

(U) NAVSUP WSS contracting officials should assess and determine whether payments above actual costs were made on the five definitized delivery orders. Conducting this assessment will assist NAVSUP WSS in determining whether payments above actual costs were made and implement available options to seek recovery of any overpayments in accordance with the DFARS. The DFARS allows the Government to request a voluntary refund from a contractor. Specifically, DFARS 242.7100 defines a voluntary refund as a payment or credit to the Government from a contractor that is not required by any contractual or other legal obligation. DFARS Procedures, Guidance, and Information 242.7100 (3)(i) and (ii) state to request a voluntary refund only when the contracting officer concludes that the contractor overcharged under a contract and retention of the amount in question by the contractor would be contrary to good conscience and equity. We request that, within 30 days of the final report, the Commander, NAVSUP WSS provide comments that address the efforts to assess and determine whether payments above actual costs were made on the five delivery orders and implement available options to seek recovery.

**b. (U) Definitize the remaining delivery orders under Basic Ordering Agreement N00383-18-G-N701.**

***(U) Chief Logistician–Aviation, Naval Supply Systems Command  
Weapon Systems Support Comments***

(U) The Chief Logistician–Aviation, NAVSUP WSS, responding for the Commander, Naval Supply Systems Command Weapon Systems Support, agreed, stating that NAVSUP WSS will continue working to definitize the remaining Vertex M&S undefinitized contract actions as quickly as possible. The Chief Logistician stated the estimated definitization dates for N00383-19-F-N704, N00383-20-F-N700, N00383-21-F-N700, and N00383-22-F-N702 are August 2024, second quarter FY 2025, third quarter FY 2025, and first quarter FY 2025, respectively.

<sup>17</sup> (U) FAR Part 2, "Definitions of Words and Terms," for "Other Than Certified Cost and Pricing Data" and FAR Part 15, "Contracting by Negotiation," Subpart 15.4, "Contract Pricing," Section 15.403, "Obtaining certified cost or pricing data," 15.403-3, "Requiring data other than certified cost or pricing data."

### ***(U) Our Response***

(U) Comments from the Chief Logistician–Aviation, NAVSUP WSS addressed the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation when NAVSUP WSS provides support that the remaining delivery orders under BOA N00383-18-G-N701 are definitized.

- c. **(U) Conduct fair and reasonable price determinations at the Contract Line Item Number levels to identify differences between actual costs and proposed costs before definitizing the remaining delivery orders.**

### ***(U) Chief Logistician–Aviation, Naval Supply Systems Command Weapon Systems Support Comments***

(U) The Chief Logistician–Aviation, NAVSUP WSS, responding for the Commander, Naval Supply Systems Command Weapon Systems Support, disagreed, stating that NAVSUP WSS should not wait until all actual costs are incurred before definitizing the open undefinitized contract actions. The Chief Logistician stated that it is in the best interest of both parties to definitize the undefinitized contract actions within schedules established per DFARS 217.7404-3 and preserve the inherent incentive for vendors to control costs under firm-fixed-price contracts.

(U) The Chief Logistician also stated that NAVSUP WSS can request discrete material and labor hour cost data, actuals incurred and estimates to complete, at the CLIN level in support of negotiations, despite the challenges NAVSUP WSS and the auditors have encountered historically. The Chief Logistician stated that NAVSUP WSS will document the contract files if Vertex M&S is not willing or able to provide the requested CLIN-level detail.

### ***(U) Our Response***

(U) Although the Chief Logistician–Aviation, NAVSUP WSS disagreed with the recommendation, comments from the Chief Logistician–Aviation addressed the recommendation; therefore, the recommendation is resolved but will remain open. The intent of our recommendation was not to wait until actual costs are incurred before definitizing the open delivery orders. NAVSUP WSS should review historical actual costs at the CLIN level when definitizing the delivery orders to obtain fair and reasonable prices for repair of AN/APG-65 and AN/APG-73 radars on the F/A-18 Hornet. NAVSUP WSS could benefit from analyzing the touch and support costs at a CLIN level to identify where actual costs are lower than what was proposed during negotiations and before definitizing the delivery orders. The Chief Logistician stated that NAVSUP WSS will request actual costs incurred and cost estimates to complete for the discrete material and labor hour costs at the CLIN

(U) level in support of negotiations. Therefore, we will close the recommendation when NAVSUP WSS provides support that they requested actual cost data at the CLIN level when negotiating the remaining delivery orders.

- d. **(U) Identify and implement a methodology for consistently allocating the support costs across the repair Contract Line Item Numbers and require the contractor to use the consistent methodology.**

### ***(U) Chief Logistician–Aviation, Naval Supply Systems Command Weapon Systems Support Comments***

(U) The Chief Logistician–Aviation, NAVSUP WSS, responding for the Commander, Naval Supply Systems Command Weapon Systems Support, agreed, stating that NAVSUP WSS will continue to place emphasis on the support cost allocation during current and future negotiations. The Chief Logistician stated that NAVSUP WSS has been working on this issue for the past 10 to 15 years, mainly by obtaining the Price Fighters' expertise to review program support to touch labor hour ratios, and using the Price Fighters' recommendations as negotiation objectives. According to the Chief Logistician, NAVSUP WSS has examples of at least six different Raytheon radar repair programs for which the Price Fighters have analyzed and provided recommendations on program support to touch labor hours in support of NAVSUP WSS negotiations.

(U) Additionally, the Chief Logistician stated that NAVSUP WSS will continue to discuss support cost allocation methods with Raytheon (Vertex M&S) and engage with the Price Fighters to ensure reasonable support to touch cost ratios. The Chief Logistician stated that it is not within NAVSUP WSS' control to require Raytheon to change their accounting system and program support cost allocation methods.

(U) The Chief Logistician also stated that it is normal NAVSUP WSS business practice to question variation in unit prices and ask contractors to explain and provide justification to conduct price analysis on a per-unit basis. There are benefits to negotiating on a program level versus an item level for these complex radar systems. Despite that fact, unit price integrity remains of utmost importance and is the reason NAVSUP WSS performs both cost and price analysis.

***(U) Our Response***

(U) Comments from the Chief Logistician–Aviation, NAVSUP WSS addressed the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation when NAVSUP WSS provides support that they coordinated with the Price Fighters when negotiating support costs on delivery orders for repair of Airborne Fire Control Radar Systems, including the AN/APG-65 and AN/APG-73 on the F/A-18 Hornet.

## (U) Appendix A

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### (U) Scope and Methodology

(U) We conducted this performance audit from July 2023 through July 2024 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.

(U) To determine whether the DON obtained fair and reasonable pricing for repair of Airborne Fire Control Radar Systems on the F/A-18 Hornet, we interviewed officials from the following Components to identify their roles and responsibilities and obtained documentation for repair of the Airborne Fire Control Radar Systems.

- (U) Defense Pricing and Contracting, Assistant Secretary of Defense (Acquisition)
- (U) PMA-265
- (U) NAVSUP WSS
- (U) DCAA
- (U) DCMA
- (U) Vertex M&S
- (U) Raytheon

(U) Vertex M&S reviewed and commented on relevant portions of the draft report and any comments provided were considered in preparing the final report.

### (U) Universe and Sample of AN/APG-65 and AN/APG-73 Systems Repair Contracts

(U) From February 13, 2018, to September 22, 2022, NAVSUP WSS awarded 17 delivery orders under BOA N00383-18-G-N701 but terminated 2 delivery orders prior to incurring any repair costs. NAVSUP WSS used the remaining 15 delivery orders, totaling \$194.2 million, for repair of parts. NAVSUP WSS obligated \$144.2 million of the total \$194.2 million because NAVSUP WSS has not definitized six of the delivery orders and cannot obligate the full ceiling values. The 15 delivery orders had expenditures of \$85.8 million. See Table 2 for a list of the universe of delivery orders.



(U) Table 2. Universe of Delivery Orders

(U) Delivery Order Number	Type of Order	Status of Order	Date of Order	Total Order Amount (in millions)	Total Obligated Value (in millions)	Total Expended Value (in millions)
N00383-18-F-N700	Ceiling	Definitized	February 13, 2018	\$47.35	\$47.35	\$46.58
N00383-18-F-N701	Priced	Definitized	July 25, 2018	0.55	0.55	0.55
N00383-18-F-N702	Priced	Definitized	July 25, 2018	0.61	0.61	0.61
N00383-19-F-N700	Ceiling	Definitized	December 21, 2018	23.29	23.29	20.16
N00383-19-F-N701	Priced	Definitized	May 10, 2019	1.54	1.54	1.46
N00383-19-F-N702	Priced	Definitized	May 23, 2019	0.44	0.44	0.22
N00383-19-F-N703	Priced	Definitized	June 7, 2019	1.74	1.74	1.52
N00383-19-F-N704	Ceiling	Undefinitized	June 27, 2019	3.42	1.67	0.42
N00383-20-F-N700	Ceiling	Undefinitized	March 18, 2020	18.19	8.91	5.49
N00383-21-F-N700	Ceiling	Undefinitized	March 24, 2021	57.26	28.06	8.18
N00383-22-F-N700	Monetary Limitation	Undefinitized	January 27, 2022	0.15	0	0
N00383-22-F-N701	Monetary Limitation	Undefinitized	January 27, 2022	0.19	0	0
N00383-22-F-N702	Ceiling	Undefinitized	September 9, 2022	37.67	28.25	0.56
N00383-22-F-N703	Priced	Definitized	September 22, 2022	0.82	0.82	0
N00383-22-F-N704	Priced	Definitized	September 22, 2022	0.95	0.95	0
<b>Total</b>				<b>\$194.17</b>	<b>\$144.19*</b>	<b>\$85.75</b>

(U)

\* (U) Column total does not equal actual sum because of rounding.

(U) Source: The DoD OIG.

(U) NAVSUP WSS initially ordered repair of 71 unique parts on the 15 delivery orders. We selected a nonstatistical sample of 7 of the 71 parts to determine whether NAVSUP WSS received fair and reasonable prices. These parts had the highest quantity ordered and dollar value across the 15 delivery orders. NAVSUP WSS ordered repair of the seven parts on nine delivery orders. After selecting the sample parts, Vertex M&S officials identified that delivery order N00383-22-F-N701 was only used for testing and the quantities and dollar values ordered on that delivery order were not for repair of the parts. Therefore, we did not review sample part number 5102815-2/8655308, purchased on the delivery order. Additionally, we reviewed the modifications to the eight delivery orders to identify any changes in the quantity or dollar values ordered. We identified that NAVSUP WSS ordered repair of 473 sample parts, for a total of \$137.05 million. See Table 3 for a list and quantity of the seven sample parts selected.

(U) Table 3. Seven Sample Parts Selected

(U) Part Number	Part Name	Quantity Ordered	Total Dollar Value Ordered (in millions)
3556900-25/3556900-20*	Antenna Subassembly	111	\$29.23
3525011-150	Radar Transmitter	108	21.38
8655467/8655467-1*	Radio Receiver	118	19.49
5102815-2/8655308*	Electric Synthesizer	10	0.54
8655302	Power Supply Amplifier	68	5.52
3525026-110	Radar Receiver	40	55.20
5097670	Circuit Card Assembly	18	5.70
<b>Total</b>		<b>473</b>	<b>\$137.05**</b>

\* (U) Vertex M&S identified two part numbers. For our review, we considered them the same part because Vertex M&S used the part numbers interchangeably throughout its cost and invoice data.

\*\* (U) Column total does not equal the actual sum because of rounding.

(U) Source: The DoD OIG.

(U) NAVSUP WSS definitized five of the eight delivery orders. NAVSUP WSS is still in the process of definitizing the remaining three delivery orders. Table 4 shows the total quantity of the seven parts purchased on the eight delivery orders.

(U) Table 4. Total Quantity of the Seven Sample Parts Selected and Purchased on Eight Delivery Orders

(U) Delivery Order Number	Status of Order	Quantity Ordered	Total Dollar Value Ordered (in millions)
N00383-18-F-N700	Definitized	126	\$30.38
N00383-18-F-N702	Definitized	5	.61
N00383-19-F-N700	Definitized	56	12.05
N00383-19-F-N701	Definitized	19	1.54
N00383-19-F-N703	Definitized	5	.37
<b>Total Definitized</b>		<b>211</b>	<b>\$44.94*</b>
N00383-20-F-N700	Undefinitized	35	\$6.73
N00383-21-F-N700	Undefinitized	117	50.26
N00383-22-F-N702	Undefinitized	110	35.12
<b>Total Undefinitized</b>		<b>262</b>	<b>\$92.11</b>
<b>Overall Total</b>		<b>473</b>	<b>\$137.05</b>

\* (U) Column total does not equal the actual sum because of rounding.

(U) Source: The DoD OIG.

(~~CUI~~) We reviewed the price negotiation memorandums and attachments from NAVSUP WSS, including the contractor proposals, DCAA audits, and DCMA pricing/technical reviews. We obtained cost data for each of the seven sample parts from Vertex M&S that included actual support costs, actual labor and material costs, and invoiced amounts. We included all actual costs provided by Vertex M&S as of March 21, 2024. Additionally, we included work-in-progress estimated costs for one of the seven sample parts because Vertex M&S confirmed that this will be an actual incurred cost. We obtained purchase orders for the materials and invoice data from Raytheon for some of the sample parts. We conducted a cost analysis of the seven sample parts on the five definitized delivery orders to identify the fair and reasonable price. We compared the actual touch costs to the definitized touch costs to identify the difference. We could not compare the actual support costs to the definitized support costs on each delivery order to identify differences because Vertex M&S could not [REDACTED]

[REDACTED] We obtained disbursement history from NAVSUP WSS and compared the prices paid to the calculated fair and reasonable prices to determine whether NAVSUP WSS obtained fair and reasonable prices for repair of Airborne Fire Control Radar Systems on the F/A-18 Hornet.

(U) We also reviewed the following Federal laws, DoD regulations, and guidance related to contract pricing.

- (U) FAR 15.402, “Pricing Policy”
- (U) FAR 15.403-1, “Prohibition on Obtaining Certified Cost or Pricing Data”
- (U) FAR 15.403-4, “Requiring Certified Cost or Pricing Data”
- (U) FAR 15.404-1, “Proposal Analysis Techniques”
- (U) FAR 15.405, “Price Negotiation”
- (U) FAR 52.215-2, “Audit and Records – Negotiation”
- (U) DFARS 215.403-3, “Requiring Data Other Than Certified Cost and Pricing Data”
- (U) DFARS 217.7404-3, “Definitization Schedule”
- (U) DFARS 242.71, “Voluntary Refunds”
- (U) Defense Pricing and Contracting, “Sole Source Pricing Best Practices/ Lessons Learned,” June 14, 2021

## **(U) Internal Control Assessment and Compliance**

(U) We assessed internal controls and compliance with laws and regulations necessary to satisfy the audit objective. In particular, we assessed the internal control environment and internal controls related to pricing of the AN/APG-65 and AN/APG-73 repair contract. Additionally, we assessed the underlying principles significant to determining whether the DON obtained fair and reasonable pricing for repair of AN/APG-65 and AN/APG-73 Airborne Fire Control Radar Systems on the F/A-18 Hornet. However, because our review was limited to these internal control components and underlying principles, it may not have disclosed all internal control deficiencies that may have existed at the time of this audit.

## **(U) Use of Computer-Processed Data**

(U) We did not use computer-processed data to perform this audit.

## **(U) Use of Technical Assistance**

(U) The DoD OIG Quantitative Methods Division assisted in determining our nonstatistical sample selection.

## **(U) Prior Coverage**

(U) During the last 5 years, the Government Accountability Office (GAO) and the DoD Office of Inspector General (DoD OIG) issued two reports discussing F/A-18 Hornet spare parts. Unrestricted GAO reports can be accessed at <http://www.gao.gov>. Unrestricted DoD OIG reports can be accessed at <http://www.dodig.mil/reports.html/>.

### **(U) DoD OIG**

(U) Report No. DODIG-2020-030, “Audit of Navy and Defense Logistics Agency Spare Parts for F/A-18 E/F Super Hornets,” November 19, 2019

(U) The DoD OIG determined that for the five critical spare parts reviewed, the Navy and Defense Logistics Agency identified the quantity that the Navy needed to maintain the operational readiness of the F/A-18 E/F Super Hornet fleet. However, the Navy and Defense Logistics Agency officials could not obtain the quantity needed to satisfy current demand and fill backorders. The DoD OIG recommended that the Navy Program Manager determine the parts or supplies that are obsolete or limited in quantity and develop and implement a plan to minimize the impact of obsolete materials.

### **(U) GAO**

(U) GAO-23-105556, “Actions Needed to Further Implement Predictive Maintenance on Weapon Systems,” December 2022

(U) The GAO examined the extent to which the Military Services have: (1) implemented and (2) assessed the performance of predictive maintenance, and (3) described challenges and efforts to address challenges with implementing predictive maintenance. The GAO reviewed DOD guidance and budget materials for predictive maintenance, interviewed maintenance officials, and visited units implementing predictive maintenance. The GAO stated that the F/A-18 variants were actively using predictive maintenance to increase flight safety and reduce the likelihood of physiological episodes among flight crews, according to Navy documents and officials.

## **(U) Appendix B**

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### **(U) DoD Hotline Allegation**

#### **(U) Background**

(U) Raytheon has been repairing AN/APG-65 and AN/APG-73 radars on the F/A-18 Hornet since 1998. On January 25, 2018, NAVSUP WSS awarded sole-source BOA N00383-18-G-N701 to Raytheon for repair of the AN/APG-65 and AN/APG-73. In December 2021, Vertex Aerospace LLC acquired the repair contracts for AN/APG-65 and AN/APG-73 radars. From February 13, 2018, to September 22, 2022, NAVSUP WSS awarded 15 delivery orders under the BOA for repair of 71 parts, totaling \$194.17 million.

#### **(U) Allegation**

(U) The DON overpaid Raytheon and Vertex M&S for repair of Airborne Fire Control Radar Systems, including the AN/APG-65 and AN/APG-73 on the F/A-18 Hornet. Potential accounting system, estimating system, or Truth-In-Negotiation Act issues led to overpricing of repair contracts and orders.

#### **(U) Results**

(U) The finding of our audit substantiated the allegation. NAVSUP WSS did not obtain fair and reasonable prices for repair of 111 of the 211 parts, totaling \$32.92 million. NAVSUP WSS officials disagreed with our conclusion that the findings substantiated the allegation regarding DON overpayment to Raytheon and Vertex M&S for repair of Airborne Fire Control Radar Systems, including the AN/APG-65 and AN/APG-73 on the F/A-18 Hornet.



## (U) Appendix C

### (U) Potential Monetary Benefits

(U) Recommendations	Type of Benefit	Amount of Benefit	Account
1.a, 1.b	Questioned Costs - Recoverable. Request voluntary refund from contractor.	\$3.93 million in questioned costs related to overpayments on definitized delivery orders.	Delivery Orders N00383-18-F-N700, N00383-18-F-N702, and N00383-19-F-N700.
1.c and 1.d	Questioned Costs – Non-Recoverable. Ensure fair and reasonable pricing when definitizing remaining delivery orders.	Undeterminable. Amount is subject to definitization of delivery orders.	Delivery Orders N00383-20-F-N700, N00383-21-F-N700, and N00383-22-F-N702

(U)

(U) Note: Potential monetary benefits are funds put to better use or questioned costs.

(U) Source: The DoD OIG.

## (U) Appendix D

### (U) Fair and Reasonable Price Determinations

(CUI) NAVSUP WSS ordered repair of 211 individual parts, totaling \$44.94 million across five delivery orders. NAVSUP WSS paid [REDACTED] in touch costs for repair of the 211 parts; however, NAVSUP WSS should have paid [REDACTED] for those same parts. As a result, NAVSUP WSS paid a total of [REDACTED] above a fair and reasonable price. Additionally, NAVSUP WSS paid [REDACTED] in extra profit on the additional money paid above a fair and reasonable price. For repair of the 211 parts, the fair and reasonable price differences ranged from \$(179,293) to \$1.53 million. See Table 5 for a list of fair and reasonable determinations for repair of the seven parts.

(U) Table 5. Fair and Reasonable Determinations for Repair of Seven Unique Sample Parts

(CUI) Part Number	Delivery Order Number	Quantity Ordered	Total Contract (in millions)	Total Touch Cost on Contract (in millions)	Actual Touch Cost (in millions)	Difference Between Contract and Actual Touch Costs (in millions)	Profit on Touch Cost Difference (in millions)	Total Difference (in millions)
3525011-150	N00383-18-F-N700	5	\$ .58	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	\$(0.02)
	N00383-18-F-N702	5	0.61	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	0.02
	N00383-19-F-N700	13	1.60	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	(0.18)
8655302	N00383-18-F-N700	16	1.18	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	(0.04)
	N00383-19-F-N700	20	1.56	[REDACTED]***	[REDACTED]	[REDACTED]	[REDACTED]	0.005
	N00383-19-F-N703	5	0.37	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	(0.02)
5097670	N00383-18-F-N700	4	1.09	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	0.06
	N00383-19-F-N700	4	1.14	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	(0.01)
3556900-25 /3556900-20*	N00383-18-F-N700	60	14.13	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	1.53
	N00383-19-F-N700	4	1.00	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	0.11

(CUI)

(CUI) Part Number	Delivery Order Number	Quantity Ordered	Total Contract (in millions)	Total Touch Cost on Contract (in millions)	Actual Touch Cost (in millions)	Difference Between Contract and Actual Touch Costs (in millions)	Profit on Touch Cost Difference (in millions)	Total Difference (in millions)
8655467 /8655467-1*	N00383-18-F-N700	30	4.38	█	█	█	█	(0.10)
	N00383-19-F-N700	8	1.24	█	█	█	█	(0.08)
	N00383-19-F-N701	19	1.54	█****	█	█	█	(0.13)
5102815-2 /8655308*	N00383-18-F-N700	4	0.20	█	█	█	█	0.03
	N00383-19-F-N700	3	0.16	█	█	█	█	0.01
3525026-110	N00383-18-F-N700	7	8.82	█	█	█	█	1.47
	N00383-19-F-N700	4	5.35	█	█	█	█	1.26
<b>Total</b>		<b>211</b>	<b>\$44.94**</b>	█**	█**	█	█**	<b>\$3.93 (CUI)</b>

\* (U) Vertex M&S identified two part numbers. For our review, we considered them the same part because Vertex M&S used the part numbers interchangeably throughout its cost and invoice data.

\*\* (U) Column total does not equal the actual sum because of rounding.

\*\*\* (CUI) NAVSUP WSS ordered 20 power supply amplifiers on N00383-19-F-N700 but Vertex M&S has only delivered 19. The total touch cost on contract for the 20 is █. The actual touch costs of █ represent the costs associated with the 19 delivered. Therefore, to compare like items, we included the total touch cost on the contract for only 19 items, totaling █.

\*\*\*\* (CUI) NAVSUP WSS ordered 19 radio receivers on N00383-19-F-N701 but Vertex M&S delivered 18. The total touch cost on the contract for the 19 is █. The actual touch costs of █ represent the costs associated with the 18 delivered. Therefore, to compare like items, we included the total touch cost on contract for only 18 items, totaling █.

(U) Source: The DoD OIG.

## (U) Management Comments

### (U) Naval Supply Systems Command Weapon Systems Support



DEPARTMENT OF THE NAVY  
 NAVSUP WEAPON SYSTEMS SUPPORT  
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 5450 CARLISLE PIKE MECHANICSBURG PA 17050-2411  
 1837 MORRIS STREET NORFOLK VA 23511-3492

IN REPLY REFER TO:  
 NAVSUP WSS  
 4200  
 NOA  
 23 Jul 24

#### MEMORANDUM

From: Chief Logistician-Aviation, NAVSUP Weapon Systems Support  
 To: DoD Office of Inspector General

Subject: NAVSUP WSS RESPONSE TO PROJECT NO. D2023-D000AT-0143.000,  
 AUDIT OF REPAIR PRICING ON THE F/A-18 HORNET RADAR SYSTEMS

NAVSUP Weapon Systems Support (WSS) non concurs with the DoD OIG's conclusion that their findings substantiated the allegation regarding DON overpayment to Raytheon (Vertex M&S) for repair of the F/A-18 Hornet AN/APG-65 and AN/APG-73 Airborne Fire Control Radar Systems.

The DoD Office of Inspector General's statement, "NAVSUP WSS did not obtain fair and reasonable prices for repair of 111 of the 211 parts, totaling \$32.92 million," is a significant misrepresentation. In fact, the DoD OIG's analysis concludes there was a potential \$3.93M (~8.7%) "overpayment" of the total value of 7 sample parts across five (5) different delivery orders, some of which had actual costs incurred higher than the negotiated Firm, Fixed Prices (FFPs) and some delivery orders show actual costs incurred lower than negotiated FFPs. (NAVSUP WSS notes that, even if the DoD OIG concludes fair and reasonable pricing wasn't in some circumstances achieved, the term "overpayment" is inapt; such term is a term of art generally meant to indicate more has been paid than contractually agreed. That is not the case here and thus that term shouldn't be used here.)

The DoD OIG's retroactive analysis of actual touch labor costs incurred on previously negotiated FFP contracts used information that was not available to Contracting Officers during FFP negotiations and conflicts with FAR part 16.202. FAR 16.202 describes a FFP contract as providing for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. NAVSUP WSS uses actual cost incurred data from FFP contract performance to inform negotiation of future contracts.

In addition, the DoD OIG's report does not sufficiently explain Raytheon (Vertex) accounting system constraints or NAVSUP's due diligence spanning decades to allocate appropriately and negotiate fair and reasonable Program Support costs on all Raytheon radar programs, comprising various F/A-18 radar systems (APG65/73, APG-79, ATFLIR), P-8's APY-10 radar, H-60's MTS FLIR and V22's FLIR, amounting to ~\$.5B annually in support of the Naval Aviation Enterprise (NAE).

## (U) Naval Supply Systems Command Weapon Systems Support (cont'd)

NAVSUP's response to the DoD OIG's recommendations are as follows.

- a. (U) Assess and determine whether payments above actual costs were made on the five delivery orders and implement available options to seek recovery, including voluntary refunds of at least \$3.93 million, in accordance with Defense Federal Acquisition Regulation Supplement 242.71.

*NAVSUP WSS non concurs with this recommendation and does not intend to retroactively analyze actual costs incurred on fully definitized Firm, Fixed Price (FFP) contracts to seek voluntary refunds. NAVSUP WSS reviewed Defense Federal Acquisition Regulation Supplement 242.71 and does not concur that this situation meets the criteria of PGI 242.7100 (3)(i) and (ii). In addition, FAR part 16.202 describes a FFP contract as providing for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. This contract type places upon the contractor maximum risk and full responsibility for all costs and resulting profit or loss. It provides maximum incentive for the contractor to control costs and perform effectively and imposes a minimum administrative burden upon the contracting parties. Using this definition as the premise for FFP, we should never expect the contract specialist's negotiated costs prior to contract performance to match the actual costs incurred after contract performance. The disconnect between negotiated/actual incurred costs under a FFP contract is not an indicator, in and of itself, of the contract specialist's inability to obtain fair and reasonable prices, nor a signal that a voluntary refund should be considered.*

- b. (U) Definitize the remaining delivery orders under Basic Ordering Agreement N00383-18-G-N701.

*NAVSUP WSS concurrs with this recommendation and will continue working to definitize remaining Vertex UCAs as quickly as possible. Vertex acknowledges they are late on proposals. DCAA and DCMA continue to express concern regarding Vertex's inability to provide supporting actual cost data in response to proposal Requests for Information (RFIs).*

*Latest status (as of 18 July 2024) of remaining undefinitized ceiling priced contracts:*

*N00383-19-F-N704- Estimated Definitization Date (EDD) is AUG 2024.*

*N00383-20-F-N700- EDD is 2<sup>nd</sup> Quarter FY25. NAVSUP WSS received an audit report from DCAA with no opinion or recommendation due to lack of necessary supporting data from Vertex.*

*N00383-21-F-N700- EDD 2<sup>nd</sup> / 3<sup>rd</sup> Quarter FY25, depending on proposal quality and auditability. NAVSUP WSS expects to receive Vertex FFP proposal by end of month (EOM) JULY 2024 or AUG 2024.*

## (U) Naval Supply Systems Command Weapon Systems Support (cont'd)

*N00383-22-F-N702 - EDD is 1<sup>st</sup> Quarter FY25. Vertex proposal update (TINA sweep) is due 9 AUG 2024. NAVSUP WSS Price Fighters reviewed the original proposal.*

- c. (U) Conduct fair and reasonable price determinations at the Contract Line Item Number levels to identify differences between actual costs and proposed costs before definitizing the remaining delivery orders.

*NAVSUP WSS non-concurs with this recommendation, in terms of waiting until all actual costs are incurred before definitizing the open UCAs. It is in the best interest of both parties to definitize UCAs within schedules established per DFARs 217.7404-3 and to preserve the inherent incentive for vendors to control costs under FFP contracts.*

*NAVSUP can request discrete material and labor hour cost data (actuals incurred and estimates to complete) at the CLIN level in support of negotiations, despite the challenges we (and auditors) have encountered historically.*

*For example, DCAA's audit report number 3991-2024D2100001 dated 17 MAY 24 regarding Vertex's FFP proposal to definitize delivery order N00383-20-F-N700 states "We were unable to access whether the costs are reasonable in compliance with FAR 31-201-3, Determining Reasonableness. The contractor did not provide adequate supporting data for both their proposed costs and the incurred costs included in the proposal. FAR 15 Contracting by Negotiation requires cost or pricing data that is complete, accurate and current to support how the contractor derived their proposed cost, to allow the contracting officer to ascertain that the costs are at a fair and reasonable price."*

*NAVSUP WSS will document contract files if Vertex is not willing or able to provide requested CLIN level detail.*


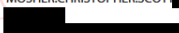
- d. (U) Identify and implement a methodology for consistently allocating the support costs across the repair Contract Line Item Numbers and require the contractor to use the consistent methodology.

*NAVSUP WSS acknowledges this recommendation and will continue to place emphasis on Raytheon (Vertex) Program Support cost allocation during current and future negotiations. NAVSUP WSS has been working on this issue for the past 10-15 years, mainly by obtaining Navy Price Fighters (NPFs) expertise to review program support to touch labor hour ratios and using their recommendations as negotiation objectives. NAVSUP has examples of at least six (6) different Raytheon Radar repair programs where NPFs analyzed and provided recommendations on program support to touch labor hours in support of NAVSUP WSS negotiations.*

## (U) Naval Supply Systems Command Weapon Systems Support (cont'd)

*NAVSUP WSS will continue to discuss Support Cost allocation methods with Raytheon (Vertex) and engage with Navy Price Fighters to ensure reasonable support to touch cost ratios. However, it is not within NAVSUP's control to require Raytheon to change their accounting system and Program Support cost allocation methods.*

*In addition, NAVSUP WSS normal business practice is to question variation in unit prices and ask Contractors to explain/ provide justification to conduct price analysis on a per unit basis. There are benefits to negotiating on a program level vs. item level for these complex radar systems. Despite that fact, unit price integrity remains of utmost importance, thus the reason NAVSUP WSS performs both cost and price analysis.*

MOSHER.CHRISTOPHE R.SCOTT    
Chris Mosher, SES  
Chief Logistician – Aviation  
NAVSUP Weapon Systems Support, Philadelphia



## (U) Acronyms and Abbreviations

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<b>(U) AESA</b>	Active Electronically Scanned Array
<b>(U) BOA</b>	Basic Ordering Agreement
<b>(U) CLIN</b>	Contract Line Item Number
<b>(U) DCAA</b>	Defense Contract Audit Agency
<b>(U) DCMA</b>	Defense Contract Management Agency
<b>(U) DFARS</b>	Defense Federal Acquisition Regulation Supplement
<b>(U) DON</b>	Department of the Navy
<b>(U) FAR</b>	Federal Acquisition Regulation
<b>(U) GAO</b>	Government Accountability Office
<b>(U) NAVSUP WSS</b>	Naval Supply Systems Command Weapon Systems Support
<b>(U) PMA-265</b>	F/A-18 & EA-18G Program Office



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