# Justification and Approval (J&A) *for* Other Than Full and Open Competition

**Was a J&A approved for the preceding acquisition where that acquisition required a J&A?** ☒ Yes ☐ No

!! Attach the preceding J&A in the staff package for this J&A. The preceding J&A will be used as a reference document.

**Is this a new or amended J&A Document?** ☒ New ☐ Amended ( *Prior to Award Only!* )

**Is this a Bridge Action as defined at DAFFARS 5302.101?** ☐ Yes ☒ No

**Dollar Value of this Acquisition:** ☐ ≤ $750K ☐ > $750K and ≤ $15M ☐ > $15M and ≤ $100M ☒ > $100M

**Contracting Activity:** AFMCLC/WAMK

**Purchase Request (if available) / Local ID Number: NA**

**Program / Project (and PE, if applicable): F-16 Center Display Unit**

**Program Type (PEO, Enterprise, of Operational): PEO**

**Authority:**

6.302-1 – 10 USC 3204(a)(1), Only One Responsible Source - No Other Supplies or Services Will Satisfy Agency Requirements

**Estimated Contract Cost (including options):** [redacted]

J&A Type: ☒ Class ☐ Individual

!! Provide estimated cost of all contracts.

## COORDINATION ( DAFFARS 5306.304(a) )

Sign and Save Procedure

** The text in the signature blocks below is editable, including the title.

** To remove a row, click the "X" next to the signature block. **CAUTION:** Once removed, it can only be restored by downloading the BLANK FORM again.

| Date | | Signature | |
|---|---|---|---|
| 08 Apr 2024 | F-16 Program Manager<br>Troy Van Buren, GS-13<br>AFLCMC/WAMB / (801)777-0330 | [redacted] | X |
| 15 Apr 2024 | F-16 Contracting Officer<br>Nathan Lee, GS-13<br>AFLCMC/WAMK, (801)777-6878 | [redacted] | X |
| 15 Apr 2024 | Local Legal Review<br>Heidi Fisher, NH-04<br>AFLCMC/JAQ, (801)586-4189 | [redacted] | X |
| 18 Apr 2024 | Chief of the Contracting Office (COCO)<br>Andrew Hatch, NH-04<br>AFMC/OL_H/PZC, (801)586-8602 | [redacted] | X |
| 25 Apr 2024 | Competition Advocate<br>Kayla V. Marshall, NH-04<br>OL_H/PZCA/B | [redacted] | X |
| 14 May 2024 | Acting, Director of Contracting<br>Christi A. Fruhwirth, NH-04<br>AFMC OL_H/PZ/PK | [redacted] | X |
| 19 Jun 2024 | PEO / Commander (Requirements Cognizance)<br>Jason D. Voorheis, Brig Gen, USAF<br>AFLCMC/WA | [redacted] | X |

## Justification and Approval (J&A) *for* Other Than Full and Open Competition

| Date | Deputy Assistant Secretary (Contracting)<br>Alice W. Treviño, Maj Gen, USAF<br>SAF/AQC | Signature |
|---|---|---|
| 19 Sep 24 | | [redacted] |

**APPROVAL ( DAFFARS 5306.304(a))**

| Date | Senior Procurement Executive<br>Andrew P. Hunter<br>SAF/AQ / (703)697-6361 | |
|---|---|---|
| 25 OCT 2024 | | [redacted] |

# Justification and Approval (J&A) *for* Other Than Full and Open Competition

## I. Agency and Contracting Activity.

United States Air Force
AFLCMC/WAMK
Contracting Officer: Nathan P. Lee
[redacted]
Purchase Request (PR) Number: NA

## II. Nature and/or description of the action being approved.

Upon approval to use other than full and open competition procedures, the United States Air Force (USAF) F-16 System Program Office (SPO) will enter a non-commercial contract to provide F-16 Blocks 30/32/40/42/50/52 C&D model aircraft with the same single common configuration of the Center Display Unit (CDU). The CDU is currently being installed and supported under contract FA823219D005 which was a sole-source, five-year, Indefinite Delivery/ Indefinite Quantity (IDIQ) awarded in April 2019 to Raytheon Technology Services Company (RTSC) with an ordering period that ended in December 2023. The final order under the previous contract is expected to end December 2024. The new follow-on contract will procure an estimated 315 CDU Assembly kits, spares, Non-Recurring Engineering (NRE) services, Interim Contractor Support (ICS) for the repair and overhaul of Line Replaceable Units (LRU), depot stand-up support, repair technical manuals, provisioning for Shop Replaceable Units (SRUs), and integration/updates to F-16 Software Capability Upgrade and M-series software Operational Flight Programs (OFP) support.

The contract will be a new 5 year IDIQ with a single 5 year option (10 years total) contract for a supply with some services (Interim Contractor Support (ICS) and Non-Recurring Engineering (NRE)) with Firm Fixed Price, Cost Reimbursement No Fee (travel), Not Separately Priced (data) and Cost-Plus Fixed Fee pricing arrangements. The ordering period will be for 5 years after date of award to order CDU kits, spares and support. The 5-year option, if exercised, will provide contractor support for engineering anomalies, cyber upgrades, interim contractor support, and depot activation. Delivery dates of any severable contract service will not exceed 12 months from date of order.

Effective 6 December 2021, RTSC divested part of its portfolio to Vertex Modernization and Sustainment LLC (Vertex) through a sale and transition agreement to complete by December 2023. The sale included the F-16 CDU portfolio developed by RTSC as the CDU Original Equipment Manufacturer (OEM). A contract novation was completed 1 January 2022 between Raytheon and Vertex for contract FA823219D005.

A sole-source award to Vertex is justified in accordance with the authority found in 10 USC 3204(a)(1), as implemented by Federal Acquisition Regulation (FAR) 6.302-1, Only One Responsible Source - No Other Supplies or Services Will Satisfy Agency Requirements. Vertex is the only contractor capable of providing the supplies and services described in Section III above for four primary reasons; 1) Award to any other source for the continued production of the CDU, a major system that provides the F-16 with a highly specialized critical safety of flight system, or continued provision of the highly specialized services described in Section III, would result in unacceptable delays in fulfilling the Government's requirements. 2) Vertex is the only company with the necessary data rights capable of providing the Government with necessary support for already fielded CDUs as well as the continued production of CDUs to meet the Government's requirements. 3) Vertex is the only company able to provide the necessary support to fielded CDUs. And 4) substantial duplication of costs, not expected to be recovered through competition, to introduce a new competitor for the CDU. As set forth in more detail in Sections V and VII, no other source was identified that has the capability to meet the Government's CDU requirements.

Estimated Value: [redacted]

Contract award is to Vertex Modernization and Sustainment LLC. Cage Code 96AJ0.

J&A: Class

Estimated award date is December 2024

## Justification and Approval (J&A) *for* Other Than Full and Open Competition

**III. Description of supplies/services required to meet agency needs.**

The program is seeking a sole-source acquisition to provide the following to support the CDU program: non-recurring engineering (NRE), CDU kits, Windows Licenses, Spares Support, Firmware & Software Support, Hardware Support, CDU LRU Repairs, Over & Above, Board Computers, Cyber LRU's, Travel, and Data.

The contract requires delivery of the following data items that are not separately priced, the Government's requirement is for data to be delivered with Government Purpose Rights except for CDRL A009 Computer Software Product End Item, which the Government requires either Government Purpose Rights or Commercial Computer Software licenses:

| Exhibit | Title | Exhibit | Title |
|---|---|---|---|
| A001 | Program Management Plan | A010 | Software Design Description |
| A002 | Supplier's Configuration Management Plan | A011 | Firmware Support Report |
| A003 | Contractor's Progress, Status & Management Plan | A012 | Interface Control Document |
| A004 | Risk Management Status Report | A013 | Product Drawings and Associated Lists |
| A005 | Conference Agenda | A014 | DMSMS Management Plan |
| A006 | Conference Minutes | A015 | Engineering Change Proposals (ECP) |
| A007 | Quality Deficiency Report | A016 | Notice of Revision |
| A008 | Test/Inspection Report | A017 | Commercial Asset Visibility (CAF AF) |
| A009 | Computer Software Product End Item | A018 | Maintenance Data Collection Report |

RDT&E, Procurement, and Operations & Maintenance funds are planned to be utilized on the contract contemplated by this Class J&A. Costs captured to support current known requirements for this IDIQ equals [redacted] the F-16 Program Office estimates that potential support for Navy F-16 CDU procurement, additional Cyber requirements forthcoming, as well as industry's evolving Artificial Intelligence (AI), and Machine Learning (ML) capabilities that are being investigated as possible candidates for future integration within the CDU system would increase the IDIQ threshold up to [redacted] In order to establish the Class J&A estimated amount, a full cost and pricing analysis was executed and approved by AFSC/FZC based on previous CDU contracting actions, costs associated with all CLINs on the current contract and expected pricing and inflationary factors for the expected PoP of the contract.

**IV. Demonstration that the contractor's unique qualifications or the nature of the acquisition requires use of the authority cited above.**

1. Award to any other source would result in unacceptable delays.

   The Government estimates that award to any source other than Vertex would result in a delay of 8 to 10 years. This includes between 7 and 8 years for a new contractor to stand up, test, qualify, produce, and deliver new CDUs. An additional 1 to 2 years would be required for the Government to conduct a competitive source selection and complete contract actions.

   This 8-to-10-year timeline was developed by working with Contracting (WAMKA,) the Systems Engineering group associated with CDU (WAMEM), Software (SWES/MXDPE), and the Simulated Integration Lab (SILs). Flight test hours and costs were based on previous testing for CDU and culminated as a group by identifying the number of flight tests and data efforts associated with test results and data gathering efforts between the CDU team and contractor.

   In addition to the operational impacts of an 8 to 10 year delay, no other contractor could meet the AESA radar JEON production/support requirements of having Advanced Combat Fleet (ACF) coded F-16s configured with CDU by FY28. In 2019, AESA radar JEON-NC-0008 (Classified) for ACF coded F-16's mandated CDU installations. The Full Operational Capability (FOC) for the JEON is currently targeted for 4QFY28. Vertex is the only contractor capable of meeting the production/support JEON requirement by FY28. The installation schedules and resources allocated by the Air Force to facilitate the immediate placement of CDU do not allow for a delay in the delivery of CDUs to the ACF combat coded F-16s. This ACF configuration not only targeted ANG and AFRC F-16s already with CDU, but also drove the modification to include Air Combat Command (ACC) F-16s that were identified as the majority balance of the total aircraft encompassed by the new ACF.

Any delay will not only impact the warfighter but would also put CDU out of cycle with current planned modifications. A delay in support capability to the aircraft installed with CDU would lead to an unacceptable number of F-16 aircraft unable to operate. Delaying delivery of the first CDU by nearly a decade is clearly unacceptable when Vertex is capable of meeting the FOC requirement in the JEON by 2028 (i.e., delivery of all CDUs required).

2. Vertex is the only company with the necessary data rights.

In September 2009, the 508th Aircraft Sustainment Group Commander approved the F-16 CDU Acquisition Strategy (AS) for 214 Air National Guard (ANG) and Air Force Reserve Command (AFRC) Pre-Block F-16's. The AS included the requirement for Government Purpose Data Rights necessary to perform organic depot repair capabilities, organic software upgrade capabilities, and provisioning.

The Government has acquired sufficient data through the previous contract to support organic repair. Data obtained include detailed drawing and engineering data to support planned organic repair and component replacement identified in the team's Source of Repair Analysis (SORA) efforts with OO-ALC and the 416th support and sustainment group. More specifically, prior contracts included CDRLs to deliver level I (component checks for "go-no go") and II (limited component replacement) drawings to meet the Government's requirements of organic depot repair capabilities, organic software upgrade capabilities, and provisioning. Additional data to support increased depot repair capability was also acquired by the USAF, which facilitated increased repair capabilities by USAF personnel. The current intellectual property (IP) and associated IP rights obtained under previous contracts satisfy the program's requirements, the acquisition strategy, the life cycle sustainment plan, the systems engineering plan, and the test and evaluation master plan. However, to execute a full and open competition, the Government would require component level engineering drawings (level III drawings). The Government did not acquire this data because there was no prior requirement to do so. To achieve full and open competition, the F-16 SPO asked the OEM in 2015, 2017, 2019, and 2023 to provide a quote for all missing IP associated with CDU manufacturing and support, including IP related to critical subcomponents. The contractor has repeatedly stated it was not willing to provide or sell the requested data to the Air Force and has valued their IP at [redacted]

Vertex is the sole responsible source for all trial vehicle drawings for the current F-16 D-model design and integration that provides dual CDU systems operating concurrently within the same aircraft as part of the BCF install requirement. Vertex's designs for the D model are contained within proprietary in-house databases and networks and is the sole record of all the initial changes made from the fielded C-model production design to the D-model baseline currently in work and installed on test aircraft. No other source has the expertise, personnel, or test equipment needed to perform tasks and testing to successfully field CDU in D model F-16s. Additionally, no other source can meet the Air Force's minimum requirements for D models.

3. Vertex is the only company able to provide the necessary support to fielded CDUs.

The CDU produced by Vertex is currently operating on over 350 aircraft with new installations daily at CONUS and OCONUS locations. These installations require continued contractual support from Vertex for new production hardware, spares, and repair support in order to maintain operability.

The CDU produced by Vertex is the only primary flight reference (PFR) instrumentation modification that has completed the critical safety of flight system process; been approved by the Director of Engineering for Airworthiness (AFLCMC/WAE); passed the extensive Air Force Flight Standards Agency (AFFSA) certification process; and received approval/endorsement to be used as an F-16 PFR. The PFR provided by CDU is safety critical and a reportable modification. The CDU includes specialized OFP Software specifically developed for use on the F-16 aircraft. The CDU requires contractual support from the OEM to fulfill critical safety expertise in accordance with (IAW) MIL- STD-882D Software System Safety Standards. Vertex is the only source with the expertise and equipment to maintain the PFR's compliance. No other DoD platform has fielded a comparable instrumentation package and the Government lacks knowledge and testing capabilities to accomplish tasks without contractual support from Vertex.

Vertex also is the only contractor with the expertise, personnel, tooling, testing capabilities, and manufacturing experience of CDU production and support for the F-16 that can meet the Air Force's minimum requirements and capabilities of providing required spares and repair support for the already fielded F-16s with CDU. Contractual

support with Vertex to provide ICS is required to support the already +350 F-16s equipped with CDU while the Government continues working to establish depot support and additional repair capabilities, which is estimated to grow from 20% organic hardware sustainment to 70% as a result of the CDUs ordered and installed under this contract.

Additionally, despite the Government being able to sustain 95% of the CDU's software, the CDU software team still requires the assistance and expertise of Vertex to meet the latest DoD Chief Information Officer (CIO) mandated Cyber Security upgrades to the aircraft's operating system. Vertex's support is required to maintain the current approval schedule for the first Airworthiness package for Phase I of the PFD software modernization effort to meet hardening requirements. The Government does not have the expertise to upgrade the CDU to meet current Cyber requirements. No other source has the expertise, personnel, or test equipment needed to perform tasks and testing for the CDU system to meet the Air Force's minimum-security requirements.

4. There would be a substantial duplication of costs, not expected to be recovered through competition, to introduce a new competitor for the CDU.

   The total estimate for duplicated costs, which is not expected to be recovered through competition, is [redacted] This estimate includes the cost to integrate, test, and qualify a new CDU source. Specifically, the original CDU prototype testing and qualification that started immediately after competitive contract award in 2010 was [redacted] With inflation, those costs would be [redacted] in today's dollars. In addition, [redacted] would be incurred due to lost efficiencies with other modifications, planned installs, and managing multiple CDU configurations. The [redacted] of duplicated costs do not include the cost to procure missing technical data, which Vertex refuses to sell and has valued at [redacted]

Accordingly, for all the above reasons, Vertex is the only firm capable of the continued production of supplies and provision of services described in Section III above without the Government experiencing unacceptable delays to fulfill its requirements and significant cost duplication, which is not expected to be recovered through competition.

**V. Description of efforts made to ensure that offers are solicited from as many potential sources as practicable, including whether a notice was or will be publicized as required by subpart 5.2 and, if not, which exception under FAR 5.202 applies.**

Five separate sources sought synopsis documents to provide CDU production and support have been issued by the Government since the OEM (Formerly Raytheon, now Vertex) was awarded the CDU program through a competitive acquisition process in 2011. The most recent sources sought was posted 2 August 2023. The only response received from the sources sought was from the current OEM. No other contractor has ever replied to any of the previous sources sought, expressed interest, or advertised the ability to provide the requirements of the CDU even with the increased data rights acquired in 2019. This acquisition will require a Notice of Proposed Contract Action IAW FAR 5.201. The notice is anticipated to be publicized in October 2024.

**VI. Determination by the Contracting Officer that the anticipated cost to the Government will be fair and reasonable.**

The following steps will be taken to ensure the anticipated cost of this acquisition will be fair and reasonable. The Contracting Officer will comply with the procedures and criteria contained in FAR under Part 30 - Cost Accounting Standards, Part 31 - Contract Cost Principles and Procedures, and Subpart 15.4 - Contract Pricing; to include technical evaluations and audits, as appropriate. Pricing support will be requested to conduct a price analysis based on fair market value and historical purchases to assess proposed pricing along with a cost analysis to ascertain reasonableness. Additional steps to ensure price reasonableness will be under the guidance of the Contract Pricing Reference Guides, jointly developed by the Federal Acquisition Institute and the Air Force Institute of Technology. The Contracting Officer and Cost/Price Analyst will utilize the Contract Business Analysis Repository (Defense Federal Acquisition Regulation Supplement (DFARS) Procedures, Guidance, and Information (PGI) 215.4) to harness lessons learned, optimize negotiation leverage and secure the best business deal. The Contracting Officer will obtain certified cost or pricing data in accordance with FAR Subpart 15.403, as required prior to negotiations, the Contracting Officer will document pre-negotiation objectives in a Pre-Price Negotiation Memorandum and subsequent to negotiations, a final Price Negotiation Memorandum will be written. These memorandums will include details on price reasonableness and how a fair and reasonable price is established for the contractual action.

## Justification and Approval (J&A) *for* Other Than Full and Open Competition

**VII. Description of the market research conducted and the results, or a statement of the reasons market research was not conducted.**

Market research has been conducted by AFLCMC/WWMPA F-16 Program Office in the form of sources sought (latest dated 2 August 2023.) Throughout the PoP of the now expired contract FA823219D0005, as well as prior contracts, the F-16 program office has pursued additional resources to both produce and repair CDU components and perform repair and sustainment efforts outside of the OEM. Industry visits with other Government contractors currently providing assets "of likeness" or with future potential to provide such have been investigated as future sources to eliminate the sole-source contracting status with limited success. Booze Allen, Leidos, and Lockheed Martin have all been on contract to provide both engineering and repairs support based on their capabilities but none have replied to any of the sources sought for full CDU provisioning or ICS. Additionally, no Internet searches, no participation or research during the Annual Weapons Tactics (WEPTAC) meetings (latest held October 2023) to expose the Program Office to potential contractors who may provide assets or modifications like the CDU; and not even the most recent annual F-16 FMS Worldwide Review (latest held September 2023) whereby vendors provided capability briefings and discussions have provided or revealed any known businesses willing to investigate or invest in producing the full CDU system.

While the Program Office has discussed and investigated other vendor capabilities and current products that may have the ability to provide the required capabilities of the current CDU, they have been unable to identify any potential candidates that could meet current requirements without substantial delays. Sources sought included the full Performance Work Statement for the effort as well as the current part numbers. Potential offerors have been provided with the information to fully understand the requirement through the sources sought; however, no responses outside of the OEM have demonstrated interest in the CDU requirement. Future investigation of potential sources include trips planned in FY24 and FY25 to visit and discuss CDU system requirements with other businesses currently manufacturing components similar to some of those utilized by the CDU to actively pursue additional sourcing outside the current OEM.

**VIII. Any other facts supporting the use of Other Than Full and Open Competition.**

None

**IX. List of any sources that expressed, in writing, an interest in the acquisition.**

NA

**X. A statement of the actions, if any, the agency may take to remove or overcome any barriers to competition before any subsequent acquisitions for the supplies or services required.**

In addition to attempting to acquire the IP deliverables listed in Section III as of the date of award, after award the F-16 SPO will continue to explore whether the OEM is willing to sell the additional component level engineering drawings that could support a competition for future CDU requirements. The F-16 SPO is also engaged with the OEM and specific subcontractors to acquire further data and rights for components and repair information that could be used in support of depot repair, if such repair and troubleshooting are deemed feasible by USAF Maintenance Groups MX) and not classified as something beyond normal scope of MX shops.

**XI. Certification by the Contracting Officer.**

As evidenced by my signature above, I certify that this justification is accurate and complete to the best of my knowledge and belief.

**XII. Certification by the technical/requirements personnel.**

As evidenced by my (our) signature(s) above, I (we) certify that any supporting data contained herein, which is my (our) responsibility, is both accurate and complete.

☒ Remove the Guidance pages below.