Department of the Air Force: Justification for Other Than Full and Open Competition

For use when a justification and approval as described in RFO 6.104 is required, to include restricting competition under Part 12 for acquisitions valued over SAT.

Dollar Value of this Acquisition: ☒ ≤ $10M ☐ > $10M and ≤ $100M ☐ > $100M and ≤ $500M ☐ > $500M

CERTIFICATIONS: CO certification serves as J&A approval ≤ $10M, *See* **J&A Template Guidance** *at https://usaf.dps.mil/sites/AFCC/AQCP/KnowledgeCenter/SitePages/DAF-Contracting-Compass/Part-6---Competition-Requirements.aspx#exceptions-to-full-and-open-competition-mandatory* J&A Template Guidance tab

Date	Contracting Officer (RFO 6.104-1(12))	Signature
23 July 2026	Suzanna S. Kussman, NH-III, DAF	KUSSMAN.SUZANNA.S. [redacted] Digitally signed by KUSSMAN.SUZANNA.S. [redacted] Date: 2026.07.23 07:35:43 -07'00'
I certify that this justification is accurate and complete to the best of my knowledge and belief.		

Date	Technical and Requirements Personnel (RFO 6.104(b))	Signature
23 July 2026	[redacted]	[redacted]
I certify that the supporting data herein, which is my responsibility, is accurate and complete.		

COORDINATION

APPROVALS (RFO 6.104-2(a) Table 6-1 & R-DFARS 206.104-72 Table 206.1)

See J&A Template Guidance (https://usaf.dps.mil/sites/AFCC/AQCP/KnowledgeCenter/SitePages/DAF-Contracting-Compass/Part-6---Competition-Requirements.aspx#exceptions-to-full-and-open-competition-mandatory) - Justification Approvals tab

NOTE 1: A signature block will appear here (replacing these notes) based on the "Dollar Value of this Acquisition" selected above. Since most digital signatures that include date/time-stamps are redacted before they are made publicly available, always insert the date in the "Date" cell when affixing a digital signature to this document.

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I. Agency and Contracting Activity (RFO 6.104-1(a)(1)):

Agency: AFMC
Contracting Activity: AFTC/PZIOB, Support Services Branch

II. Nature and/or description of the action being approved (RFO 6.104-1(a)(2)):

This document approves the award of a Purchase Order on a single source basis to Marvel Aero International LLC for an Aircraft Battery Management System (ABMS) upgrade in support of the 412th MXS/MXMAE. This justification is made on an Individual basis.

III. Description of supplies/services required to meet agency needs (RFO 6.104-1(a)(3)):

This acquisition will provide an upgrade to the hardware and software of the existing legacy four station Aircraft Battery Management System (ABMS) to a six station ABMS-10X configuration to meet customer needs and Cyber Security software upgrade requirements.
Estimated value: $161,548.00
Planned Appropriations: FY26 3600 funds via PR F1S1AB6191A101
Contract Type: Firm-Fixed Price Purchase Order

CLIN 0001: ABMX-10X, controller loaded software, including keyboard and mouse. Windows 11 Pro Operating system with 1-7 processor, includes 8 port USB to serial adapter, optically isolated and surge protected; Qty: 1
CLIN 0002: Christie Charger RF80-M model, P/N: 123020-001; Qty: 6
CLIN 003: AB3K-M Interface board, harness and connection plate assy, includes EMI shield; Qty: 6
CLIN 0004: MA3000TS Temp Plate, measures/records battery temp, issues alerts, and alarms; Qty: 2
CLIN 0005: MA24DX Cell Clip off module, applies 1 ohm 3-watt load to each ni-cad cell; Qty: 2
CLIN 0006: CSMN9MF-10 Cable; Qty: 2
CLIN 0007: CSMN25MF-5 Cable, Qty: 14
CLIN 0008: DataCable, BLK Cable; Qty: 2
CLIN 0009: MA539CH1Battery hood for KC-46A Saft battery 539CH1; Qty: 2
CLIN 0010: MACR-20 Cell reversal module; Qty: 2
CLIN 0011: Freight; Qty: 1
CLIN 0012: Set Up and Technician Training, includes certifying document; Qty: 1

IV. Statutory Authority Permitting Other Than Full and Open Competition (RFO 6.104-1(a)(4)):

10 U.S.C. 3204(a)(1), Only one responsible source and no other supplies or services will satisfy agency requirements.

V. Rationale for Use of Authority (RFO 6.104-1(a)(5)):

The Air Force's requirement to procure the ABMS-10X Automated Battery Management System is available from a single source, Marvel Aero International, Inc., due to the unique capabilities and highly proprietary nature of the required supplies, which no other contractor possesses or can legally obtain. As a result, this will proceed IAW RFO 6.103-1(b) One responsible source, "Agencies may contract without providing for full and open competition when the supplies or services required by the agency are available from only one responsible source and no other type of supplies or services will satisfy agency requirement."

The justification is based on the following:
1. Proprietary Software and Hardware Integration
The ABMS-10X system is a proprietary commercial product developed entirely at private expense by Marvel Aero

International, Inc. It utilizes a closed-loop software architecture designed specifically to interface with and control Christie-branded aircraft battery charger/analyzers (such as the RF80-M series) currently utilized by the Air Force. No other manufacturer possesses the source code, proprietary data acquisition (DAQ) boards, or communication protocols required to command, control, and pull diagnostic data from these specific chargers without reverse-engineering the hardware.

2. Patented Technology
Marvel Aero/Christie utilizes a patented ReFLEX charging technology, which alternates charging pulses with brief discharge pulses to prevent battery overheating and significantly reduce charging times. The ABMS-10X is the only automated management system on the market legally authorized and technologically capable of controlling this specific patented charging algorithm. Attempting to integrate a third-party management system would disable this critical capability.

3. Voiding of Equipment Warranties and Certifications
The existing battery chargers and the ABMS-10X operate as a unified, certified system to meet strict aviation safety and calibration standards (e.g., RTCA DO-293A). Integrating a non-Marvel Aero, third-party battery management system to control the existing high-voltage charging hardware would immediately void the manufacturer's warranties, invalidate the National Institute of Standards and Technology (NIST) calibration traceability of the equipment, and violate the facility's quality management certifications.

4. Lack of Authorized Third-Party Integrators
Market research confirms that Marvel Aero International, Inc. does not license its core operating software or distribute its proprietary DAQ hardware to competing ground support equipment (GSE) manufacturers for integration into non-Marvel Aero systems. Because the proprietary data rights and software licenses are held exclusively by Marvel Aero, no other contractor has the legal right or technical ability to manufacture or provide a system that meets the government's exact technical and safety requirements.

Based on the proprietary software architecture, the requirement to interface with existing branded charging hardware, and the severe safety/warranty risks of utilizing uncertified third-party controllers, Marvel Aero International, Inc. is the only responsible source capable of satisfying the agency's requirement. Procuring this system through full and open competition would not be in the best interest of the Government and would result in the acquisition of incompatible equipment.

VI. Integrated Market Analysis and Efforts to Solicit Competition (RFO 6.104-1(a)(6), (8), and (10)):

The following actions were taken to explore competitive options in the marketplace:

1. Targeted Database and Industry Searches
Conducted searches in the System for Award Management (SAM.gov) and the SBA's Dynamic Small Business Search (DSBS) using keywords such as "aircraft battery analyzer," "automated battery charger control," and NAICS code 335999. No businesses were identified that manufacture aviation-grade, cell-by-cell automated closed-loop management systems compatible with the Air Force's existing aviation hardware.

2. Review of Similar Government Acquisitions
Analyzed the Federal Procurement Data System (FPDS) for historical acquisitions of the ABMS series across the Air Force, Navy, and Army depots over the last 5 years. Every recorded federal procurement of the ABMS-10X and its immediate predecessors (ABMS-8) was executed as a Sole Source award to Marvel Aero International, Inc. No competitive awards or successful alternative products were identified in the historical contract data.

3. Vendor Outreach
Marvel Aero International, Inc., was contacted to inquire whether there are any authorized distributors or resellers for the required items. The vendor confirmed that they are the sole authorized distributor and proprietary source of the sole authorized distributor and proprietary source of the ABMS-10X system, RF80-M Christie Charger with AB3K-M interface circuit card installed, cables and associated equipment. This confirms that even if a competitive solicitation were released, only one responsive bid (from Marvel Aero) would be received.

4. Presolicitation Notice
IAW RFO Part 5 and R-DFARS PGI 206.103-270, a public notice was posted to SAM.gov for a minimum of 15 days in order for alternate sources to inform the Contracting team of their ability to provide the required items beyond the identified single source. Following the submission deadline, zero additional responses had been received, further supporting the justification to proceed with only one responsible source as no other suppliers were identified to satisfy agency requirements.

VII. Determination of Fair and Reasonable Cost (RFO 6.104-1(a)(7)):

The Contracting Officer is responsible for evaluating, determining, and documenting the anticipated contract cost/price is fair and reasonable in accordance with RFO Subpart 15.4, Contract Pricing.

VIII. Any Other Facts Supporting the Justification (RFO 6.104-1(a)(9)):

N/A

IX. Actions to Overcome Barriers to Competition (RFO 6.104-1(a)(11):

The requiring activity commits to the following actions to preclude the necessity of future single source awards for aircraft battery management systems:

The requiring activity will actively monitor the commercial aviation Ground Support Equipment (GSE) market for the emergence of open-architecture or universal battery management systems capable of controlling multi-vendor chargers. This will be an ongoing review conducted prior to any future contract renewals.