[redacted]

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: AFRL/RMZB

Purchase Request (if available) / Local ID Number:

Program / Project (and PE, if applicable):

Program Type (PEO, Enterprise, of Operational):

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

COORDINATION (DAFFARS 5306.304(a))

Date	Program Manager Capt Joanna Montanari 711 HPW/RHBFP, [redacted]	[redacted]
Date	Contracting Officer Jessica Briggs AFRL/RMZB, [redacted]	
Date 10 Aug 2026	Local Legal Reviewer Thomas Kopacz AFMCLO/JANO, [redacted]	

APPROVAL (DAFFARS 5306.304(a))

Date 11 Aug 2026	Chief of Contracting Office (COCO) Joel B. Harrah AFRL/RMZ [redacted]	Signature [redacted]

I. Agency and Contracting Activity.

AFRL/RMZB
WPAFB, OH 45433-5309

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

The 711th Human Performance Wing (HPW) at Wright-Patterson Air Force Base, OH (WPAFB) requires specialized scientific, engineering, and technical expertise to ensure the continuous and effective operation of its Centrifuge and Research Altitude Chamber (C/RAC) facilities. This support is essential for maintaining the wing's critical Research, Development, Testing, and Evaluation (RDT&E) programs and its Fighter Aircrew Acceleration Training Program.

The contract will be a sixty (60) month IDIQ contract with an ordering period of fifty-seven (57) months to support the labor, operations, and maintenance of the C/RAC. To ensure operational continuity and efficiency, a Cost-Plus-Fixed-Fee (CPFF) contract is the most appropriate vehicle for this effort. Cost - No fee CLINs will also be utilized for ODCs. Specific ODCs are unknown/unpredictable and cannot be defined. Additionally, there may be opportunities for Fixed Price task orders, however, that will be determined at the time of the task order RFP. The contract must be awarded and fully operational by the start of Fiscal Year 2027 (1 October 2026) to prevent any disruption to C/RAC operations and maintenance.

Future Research and Development (R&D) projects, for which costs are included in the Independent Government Estimate (IGE) and that fall within the scope of this contract, will be incorporated via contract modification as their requirements are defined. These projects will be added either to existing CLINs or by establishing new CLINs as needed.

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

The 711th Human Performance Wing (HPW) seeks to award a military-unique, follow-on IDIQ contract with a sixty (60) month period of performance and fifty-seven (57) month ordering period. The contract must be awarded, executed, and fully operational for the operations and maintenance (O&M) of the Centrifuge/Research Altitude Chambers (C/RAC) by the start of Fiscal Year 2027 (FY27) on October 1, 2026.

The Contractor shall provide a broad base of scientific, engineering, and technical expertise to support the daily O&M of the centrifuge and research altitude chambers. This support is crucial for conducting high-G acceleration and high-altitude testing on physiological measurement systems. This effort includes centrifuge and chamber setup, control system programming, data collection, scheduling, troubleshooting, and repair. Testing will be conducted on physiological measurement systems using a modified flight helmet and oxygen mask with sensors during profiles in the centrifuge and altitude chambers. The goal is to demonstrate the acceleration and altitude protection provided by these systems in a simulated environment.

Continuity manuals for the O&M of the C/RAC are to be developed in conjunction with existing government-owned documents. Contractors must comply with all applicable regulations and codes (e.g., FAR, OSHA standards).

10.75 Full time equivalents (FTE's) are required in support of the effort encompassing the following skill sets:
• **Inside Observer (IO):** Qualified observer inside the RAC to monitor subjects, assist trainees, ensure equipment is in proper working order, and respond to emergencies under the direction of the Aerospace Physiologist on Duty. The IO must be CPR certified, medically cleared for high-altitude operations, and possess at least three years of relevant experience.
• **Lecturer:** Serves as the primary interface with subjects and trainees. This role demands substantial experience with the C/RAC and a thorough understanding of all safety protocols and proper procedures. The Lecturer executes training profiles, research protocols, and provides instruction on subjects including the physiological effects of

altitude, aircrew breathing systems, spatial disorientation, and the use of high-altitude protection equipment. The lecturer shall have at least three years of relevant experience.

• **Program Manager:** Provides comprehensive program management for C/RAC RDT&E projects. Responsibilities include managing data collection and analysis, securing CUI, and overseeing C/RAC staffing, logistics, and procurement. The PM serves as the primary contact for scheduling, resolves conflicts, optimizes facility use, verifies customer financial obligations, and maintains comprehensive records.

• **Maintainer:** Responsible for the maintenance and repair of the C/RAC and its subsystems, including chillers, pumps, and valves, to minimize downtime and ensure operational safety. This technician must be a technical school graduate with 3-5 years of experience, possess in-depth knowledge of special tools and test equipment, and have completed relevant factory training. They must demonstrate critical thinking and the ability to perform maintenance tasks, often without documented procedures, using engineering drawings and technical references.

• **Aerospace Physiology Officer (APO):** Aids in the planning and execution of all activities, ensuring subject and staff safety. The APO must have a deep understanding of physiology and human performance in aerospace environments and provide comprehensive training on threats and mitigation strategies. The APO is responsible for grading and qualifying human subjects and pilot trainees to withstand G-forces and altitude and holds ultimate sign-off authority on their competency. A minimum of a bachelor's degree in a related field is required, along with a graduate certificate from a military Aerospace Physiologist Officer Course and at least three years of relevant experience.

• **Research Coordinator:** Manages and coordinates all training and research activities for the C/RAC. This includes tracking and updating the schedule, resolving conflicts, and ensuring optimal facility use. The coordinator matches projects to appropriate chamber specifications, verifies financial obligations are met before scheduling, and maintains comprehensive records of all activities, payments, and communications.

• **Crew Chief:** Prepares trainees and human subjects for their centrifuge sessions by ensuring all gear and equipment (suits, helmets, masks) are properly fitted. The crew chief also provides a comprehensive pre-session briefing on procedures and safety. The crew chief shall have at least three years of relevant experience.

• **Cockpit Equipment Integration Lab (CEIL) Shop Technician:** Inspects, maintains, cleans, and certifies specialized equipment worn in a cockpit for C/RAC operations. The technician collaborates with engineers and researchers in the testing of aircrew flight equipment and provides equipment fit assessments for subjects.

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

Pursuant to RFO 6.103-1(c)(2)services may be deemed to be available only from the original source in the case of follow-on contracts for the continued provision of highly specialized services when it is likely that award to any other source would result in substantial duplication of cost to the Government that is not expected to be recovered through competition or unacceptable delays in fulfilling the agency's requirement.

The initial contract for this requirement, FA8650-09-D-6039, was awarded to KBR Wyle Services, LLC (KBR) in 2009 following a competitive Broad Agency Announcement. Subsequent market research in 2014 and 2017, which confirmed that KBR was the only source capable of meeting the requirement without unacceptable risk or delay, resulted in two sole-source follow-on contracts being awarded to KBR, FA8650-14-D-4031 and FA8650-17-C-4131, maintaining their position as the incumbent.

WPAFB has the only known centrifuge and RAC single-site facilities with the capabilities to meet the 711th HPW's research and training mission requirements. Operation and maintenance of these unique facilities requires highly specialized technicians with decades of knowledge and on-the-job training. KBR is the only contractor with the demonstrated capability to meet the government's requirements without unacceptable risk or delay. Their unique qualifications are built on:

- Incumbent Experience: Over 15 years of continuous, hands-on experience operating and maintaining this specific C/RAC facility, providing an unmatched understanding of its unique operational demands. This is

not merely a matter of familiarity, but of deeply ingrained, site-specific expertise that is critical for safe and effective operation. Historically, KBR has been the only company in this operational and research area to recruit retired and separated military Aerospace Physiology specialists. As this exclusive practice continued, these employees were promoted, causing all relevant management expertise and institutional knowledge to be concentrated solely within KBR and giving the company an exclusive monopoly. The current contract is facing a shortfall of several full-time employees. While other companies could hire the existing partial crew, they lack KBR's specialized insight to recruit qualified personnel to fill the gap. These roles require years of specific on-the-job training and certifications from the Armed Forces, primarily the U.S. Air Force, which cannot be quickly replicated. KBR is the only company with this crucial recruiting knowledge and deep familiarity with the facility itself.

Deep corporate knowledge of the facility's one-of-a-kind operational and maintenance procedures, which cannot be quickly transferred exists. This includes significant, experience-based institutional knowledge of the facility's operational and maintenance procedures that are not documented. This knowledge is specific to this facility, is not documented in commercially available manuals or training curricula, and its transfer requires a prolonged period of direct, hands-on apprenticeship. Crucially, KBR's unique position is reinforced by its role as the operator of the only other comparable centrifuge facility at Brooks City Base. This facility, utilized by the U.S. Navy and U.S. Marine Corps, provides the proprietary training to certify employees in instructing and evaluating aircrew physiological responses to G-forces. This dual-site experience provides KBR with an unparalleled and non-transferable base of knowledge in this highly specialized field.

- Specialized Personnel: A workforce holding unique certifications and extensive training specific to this centrifuge, which are not commercially available. This includes knowledge of United States Air Force (USAF) aircrew flight equipment, operation and maintenance of the centrifuge, medical clearance for altitude chamber operations, training in centrifuge extraction procedures, training in the identification of and response to unexplained physiologic events, and decompression sickness. This expertise is embodied in roles defined by the PWS, such as the Aerospace Physiology Officer (APO), who must hold a graduate certificate from the USAF's course, and the Maintainer, who is required to perform maintenance tasks without documented procedures, a skill that can only be acquired through hands-on experience at the facility. The government cannot replicate this level of specialized, certified personnel in a timely or cost-effective manner without affecting crucial RDTE studies and mission essential fighter pilot training.

An award to any source other than the incumbent would result in substantial, non-recoverable costs and introduce unacceptable delays to a mission-critical requirement. A new contractor would introduce an extensive and costly learning curve, as they would need to create a comprehensive transition plan, master the incumbent's unique equipment, reverse-engineer undocumented processes, and develop and certify new safety procedures and establish a partnership with a separate company for medical based clearance for chamber flights Based on an internal government analysis of the labor categories and required transition tasks, this learning curve is estimated to cost between $2.1M and $3.2M and require a 12 to 18 month timeframe. These are costs directly attributable to the non-standard, undocumented nature of the C/RAC facility. In addition to these costs, which are a direct consequence of the incumbent's non-transferable knowledge, the Government would incur an additional $900K in program management and technical oversight to manage the transition and mitigate the risk of catastrophic safety failures. Ultimately, these combined costs would not be recovered through competition and would significantly delay undergraduate pilot training and pre-planned research and development projects.

Critically, it is estimated that a new contractor would require at least three years to become fully operational and capable of meeting the complex C/RAC mission requirements. This multi-year delay would halt the fighter pilot training pipeline, directly jeopardizing Air Force readiness and introducing unacceptable safety risks.

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.

In accordance with FAR Part 10, 711 HPW/RH and AFRL/RMZB conducted market research to determine whether contractors possess the expertise, capabilities, and experience to competently provide services to support the mission of the 711th HPW and the operations of the Centrifuge and Research Altitude Chambers (C/RAC). This research included internet searches, outreach to both large and small businesses, and engagement with industry representatives. Additionally, searches of GSA Advantage and other mandatory sources yielded no results matching the required specifications.

RMZB posted a Sources Sought notice on SAM.gov to identify capable contractors and received responses from two companies: DCS Corporation and SierTeK, Ltd.

RMZB also coordinated with GSA to post an RFI on GSA eBuy Open to solicit interest from qualified contractors. Notifications were sent to contractors under OASIS+ Unrestricted (UR) 541330 - Research & Development and OASIS+ Small Business (SB) 541330 - Research & Development. Two responses were received: Adsync Technologies, Inc. (OASIS+ SB R&D) and DCS Corporation (OASIS+ UR R&D).

Lastly, RMZB issued an RFI to the sixteen 8a IDIQ contractors providing services support to the 711th HPW, inviting responses from capable contractors. One response was received: SierTeK, Ltd.

An evaluation of the four RFI responses revealed that no contractor possesses the requisite technical and managerial expertise to operate the Centrifuge and Research Altitude Chambers (C/RAC) facility. All respondents planned to hire the incumbent's employees, demonstrating their lack of in-house expertise. This strategy is critically flawed because it fails to account for the transfer of undocumented corporate knowledge, safety programs, and management oversight, which are essential for performance and cannot be acquired simply by hiring individual technicians. Furthermore, the failure to address the requirement for medical clearances for inside observers signifies a fundamental misunderstanding of the operational environment. This is not a trivial task; it requires establishing a contractual relationship with a third-party medical provider that has expertise in conducting flight physicals. A new contractor would face significant delays and administrative costs while sourcing, vetting, and managing this required external partnership, further elongating the timeline to become fully operational and introducing another critical point of mission risk.

KBR is the only contractor with the demonstrated capability to meet the government's requirements without unacceptable risk or delay.

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

The rates and bases proposed will be analyzed and compared to actuals on the current contract, similar labor rates, or historical Government estimates. Certified Cost and Pricing Data will be obtained and cost analysis shall be used to evaluate the reasonableness of individual cost elements. Price analysis will be used to verify the overall price reasonableness.

The IGE was based on actual costs to previously performed work on the existing contract. A Rough Order of Magnitude (ROM) from the incumbent provided a cost estimate for budget purposes of [redacted] The basis of the ROM was historical actuals to maintain and operate the facility. Additionally, historical level of projects and known, planned projects.

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

As described in Section V above, market research, IAW FAR Part 10, was conducted by synopsis of the proposed

acquisition, advising industry of the pending acquisition and soliciting inquiries from interested parties.

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

The operation of the DoD-owned centrifuge is mission-essential and directly supports national security requirements. KBR is the only American company with the sustained, long-term experience to manage this critical asset, having operated human-rated centrifuges continuously for over 15 years.

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

See Section V above.

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.

While AFRL/RMZB is fully committed to fostering competition, the primary barrier to competition for this requirement is structural and beyond the agency's control. The operation of human-rated centrifuges for mission-critical pilot training constitutes a highly specialized field with no existing commercial market.
Extensive market research and due diligence have confirmed that no other contractor possesses the unique corporate capability required to perform this work. Consequently, there are no practical actions the agency can take to foster competition for this specific requirement at this time. The agency will conduct new market research for any subsequent acquisitions to assess if market conditions have changed.

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.