United States Small Business Administration
Office of Hearings and Appeals

NAICS APPEAL OF:	
Advanced Concepts Enterprises, Inc.,	SBA No. NAICS-5968
Appellant,	Decided: October 24, 2018
Solicitation No. HQ0147-18-R-0009 Missile Defense Agency Contracts Directorate Redstone Arsenal, Alabama	

APPEARANCES

Rocky Blackwell, CEO, Darryl W. Gilley, Business Development Manager, for Advanced Concepts Enterprises, Inc.

Shalimar, Florida, Sherry Trowbridge, Contracting Officer, for the Missile Defense Agency, Redstone Arsenal, Alabama

DECISION

I. Introduction and Jurisdiction

On September 10, 2018, the Missile Defense Agency, Redstone Arsenal, Alabama (MDA), issued Request for Proposals (RFP) No. HQ0147-18-R-0009 seeking a contractor to support the Advanced Research Center (ARC). This RFP will result in the award of a five-year contract with three one-year and one half-year options. The Contracting Officer (CO) set aside the procurement entirely for Women Owned Small Businesses (WOSBs), and assigned North American Industry Classification System (NAICS) code 541715, Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology). NAICS code 541715 ordinarily has a corresponding 1,000 employee size standard, but the RFP indicated that the procurement fit within the exception for Guided Missiles and Space Vehicles, Their Propulsion Units and Propulsion Parts, which utilizes a corresponding 1,250-employee size standard. Initial offers are due on October 25, 2018. (RFP § L-2.2.)

On September 11, 2018, Advanced Concepts Enterprises, Inc. (Appellant), filed the instant appeal. Appellant asserts that the correct NAICS code for this procurement is 541513, Computer Facilities Management Services, which has a corresponding $27.5 million annual receipts size standard. For the reasons discussed *infra*, the appeal is denied.

The U.S. Small Business Administration (SBA) Office of Hearings and Appeals (OHA) decides NAICS code appeals under the Small Business Act of 1958, 15 U.S.C. § 631 *et seq.*, and 13 C.F.R. parts 121 and 134. Appellant filed the instant appeal within ten calendar days after issuance of the RFP, so the appeal is timely. Federal Acquisition Regulation (FAR) 19.303(c)(1); 13 C.F.R. §§ 121.1103(b)(1), 134.304(b). Accordingly, this matter is properly before OHA for decision.

II. Background

A. The Performance Work Statement (PWS)[1]

The Advanced Research Center is a Research, Development, Test and Evaluation (RDT&E) facility designed and operated to support Ballistic Missile Defense System (BMDS) Hardware-in-the-Loop (HWIL) Ground Test and Flight Test activities. The ARC is part of MDA's designation as a Special Purpose Processing Node (SPPN). This contract includes SPPN, Unclassified Networks, and other components of the ARC. (PWS § 1.0.)

The Director of Test-ARC Mission is to perform network/infrastructure design, house and maintain the BMDS test assets, maintain Cybersecurity compliance, and perform lab asset management to realistically emulate/simulate the complex weapon systems of the BMDS in support of BMDS Ground Testing and BMDS Flight Test Risk Reduction activities. Lab assets include guided missiles and space vehicles tactical hardware and software. These systems will be expanded under this contract to include new sensors and tactical systems requiring ARC system design and development activities to integrate new programs into a complex BMDS. (*Id.*)

Over half of the equipment is tactical and modeling and simulation equipment representing BMDS elements. These HWIL test assets represent the Army Navy/Transportable Radars Surveillance and Control Model 2, the Sea-based X-band Radar, the Cobra Dane radar, and multiple Upgraded Early Warning Radars, with plans to add the Long Range Discrimination Radar (LRDR) and the Medium Range Discrimination Radar-Pacific. The Integrated System Test Laboratories (ISTC) contain the components for the Ground-based Midcourse Defense weapon system representation. The ISTC Labs will undergo a redesign study under this contract to improve Ground Test throughput. "A thorough knowledge of the BMDS and the interdependency of these labs is required to manage the assets." (*Id.* at 2.)

MDA is transitioning to a new ground test concept that includes Continuous Integration and Continuous Agile Testing (CI/CAT). Continuous Integration (CI) testing includes Continuous Development Integration (CDI) and Continuous System Integration (CSI) testing. CDI is defined as the Early Integration between the Framework and participating Element sites. During CDI the facility must support early tactical software checkout, Framework and test case install and check-out (I&CO), 1-on-1, 1-on-Many, and standalone testing. CDI activities will minimize ground test integration and execution risk and improve the efficiency of BMDS development, test, and fielding. (*Id.* at 2-3.)

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[1] RFP Amendment 0002, issued October 16, 2018, revised the PWS, among other things. References are to the conformed copy.

As a result of CDI objectives, the contractor will develop new processes and tools to respond to changes driven by CDI to include network design and expansion as well as installation and integration of Software/Hardware updates provided by elements as a result of CDI discoveries. (*Id.* at 3.) During CSI, Sprint test cases will certify the event architecture and verify test objectives. CSI testing could include these phases: Full Architecture Integration, Test Case Integration, and Event Architecture Certification. During this testing phase the facility must support formal lockdown processes. CSI testing is required prior to entering a CAT Sprint. (*Id.* at 3.)

Formal CAT periods will focus on runs for record (RFR) execution and all assets will be in configuration control. CAT architectures will be much larger than those in CI. Testing shall be executed out of an ARC Technical Execution Center (ARCTEC). Testing will be managed via a Resource Management cell and this contract. (*Id.* at 3.)

MDA will begin design and development of the new Combined Test Center (CTC) facility to house the Missile Defense Data Center, the ARC, and related test assets. Under this contract, the Contractor will participate in the system design activities to implement improvements that contribute to CI/CAT, asset management, and data flow across all MDA systems housed in the CTC. (*Id.* at 3.)

CLIN 0001 Contract and ARC Management

The contractor shall manage and maintain program cost, schedule, performance, risk, subcontracts, vendors, test assets and associated maintenance agreements, infrastructure, and data to sustain ARC operations. (PWS § 3.1a.) The contractor shall maintain a Program Management Plan that details the complete structure of contractor support, shall participate in facility expansion or modification planning meetings to ensure coordination with ARC long-range planning, testing activities, security requirements, and MDA guidance. (PWS § 3.1a, e.) The contractor shall monitor all ARC networks for proper operation, throughput, quality of service, security compliance, and that cybersecurity policies and guidelines are followed in all aspects of network operations and system administration. (PWS § 3.2.)

The contractor shall manage the procurement process for Other Direct Cost and Material for the ARC, maintain a list of spare BMDS test and evaluation lab hardware requirements, and a list of software and hardware licenses with expiration dates and impacts to Ground Test Activities. (PWS § 3.3a, c.) The contractor shall develop a maintenance plan for ARC test assets and obtain/maintain software licensing, and shall evaluate, test, and integrate all software into the ARC networks. (PWS § 3.3d, f.) The contractor shall manage and operate a shipping and receiving department/property office to inspect and verify deliveries, maintain property control records, and perform a quarterly inventory audit. (PWS § 3.3e.)

CLIN 0002 Network Management

The contractor shall maintain the schedule of all ARC activities/projects and a fully resource loaded Integrated Master Schedule (IMS), conduct weekly IMS review meetings,

facilitate asset allocation, de-confliction, configuration management and test event certification, and provide utilization and integration metrics. Also, the contractor shall integrate ARC test asset schedules with the ARC Master Schedule, and resolve conflicts between test asset requests, infrastructure needs, and facility maintenance. (PWS § 4.1.) The contractor shall maintain ARC configuration files off-site, develop and execute documentation and procedures for IT Contingency and Disaster Recovery (DR), and conduct quarterly DR tests. (PWS § 4.2.)

The contractor shall establish and maintain a centralized helpdesk and log of all incidents and requests; establish incident management procedures for all facility, software, hardware, and communications problems; and provide support services for briefings and demonstrations. (PWS § 4.3.) Also, the contractor shall develop, implement, and maintain a Configuration Management Plan, maintain test asset data, and operate software systems that record, reserve, and schedule ARC test assets. (PWS § 4.4.)

Regarding SPPN Management, the contractor shall plan, implement, and operate the ARC and provide utilization metrics on all ARC test assets. (PWS § 4.5a,e.) The contractor shall develop and implement solutions to profile traffic flow to predict problems. (PWS § 4.5f.) Also, the contractor shall evaluate new hardware and software technologies for ARC networks, provide strategic planning, and recommend approaches in designing system and network configurations, software/script development, power usage, and Reliability, Availability and Maintainability engineering support in the development of new ARC systems. (PWS § 4.5g.)

The contractor shall provide network analysis and communications engineering support for telecommunications and network systems, including the ARC side of remote nodes and ARC based customers. (PWS § 4.5h.) The contractor shall support Communications Security (COMSEC) maintenance and engineering activities for BMDS test and evaluation networks. (PWS § 4.5i.) The contractor shall collaborate to plan, document, and execute network communication interfaces between ARC network infrastructure and other network infrastructures. (PWS § 4.5j.)

The contractor shall manage IT infrastructure and networks comprised of commercial and tactical systems to include asset allocation and de-confliction, configuration management, and Integrated Master Schedule development, management, and execution. (PWS § 4.5k.) The contractor shall manage network bandwidth allocation, and metrics monitoring utilization and downtime for all Laboratories, HWIL, and formal ground test activities. (PWS § 4.5l.) The contractor shall develop network diagrams for all ARC networks / enclaves, and perform OEM-recommended preventive maintenance. (PWS § 4.5m-n.) Also, the contractor shall develop a Technology Refresh plan for the IT Infrastructure, taking into account synergies derived from the CI/CAT, Combined Test Center design, and BMDS expansion activities. (PWS § 4.6.)

CLIN 0003 Cybersecurity

The ARC handles Restricted Data and Critical Nuclear Weapon Design Information on a daily basis when executing the requirements of this contract. The contractor shall control access to information systems within the ARC, and shall create, maintain and manage all BMDS test and evaluation assets and infrastructure user accounts. (PWS § 5.0.) The contractor shall

implement a cybersecurity program for all classified and unclassified networks, and support a broad-based capability of general cybersecurity services protection for the MDA ARC test labs and assets such as hardware/software products, computer systems and subsystems, and network and communications resources. (PWS § 5.0a, b.) Also, the contractor shall continually monitor all external/ internal traffic and report monthly the health, status, and utilization of the network(s). (PWS § 5.0c.)

The contractor shall monitor and comply with all instructions for Security Technical Implementation Guides (STIGs). (PWS § 5.1a.) In addition, the contractor shall respond promptly and comply with MDA Cyber Tasking Orders (CTOs). (*Id.*) Weekly, the contractor shall perform a system wide analysis on all IT systems and infrastructure to identify vulnerabilities and implement risk mitigation recommendations. (PWS § 5.1b.) The Contractor shall safeguard and protect Controlled Unclassified Information (CUI); develop and institute a training program for ARC Contractor personnel, and monitor training and certification status of all cybersecurity personnel. (PWS § 5.1e.)

Further, the contractor shall develop and maintain security accreditation packages for ARC Network and Infrastructure hardware, software and networks; support activities required to maintain MDA system/enclave cybersecurity approvals; and also support BMDS Element Accreditation activities. (PWS § 5.1f.) Also, the contractor shall develop Risk Management Framework (RMF) packages and artifacts for classified and unclassified networks, and shall develop, update, and execute the Concept of Operations to include Cybersecurity, Information Assurance, and RMF. (PWS § 5.1h,i.)

Under Security Management, the contractor shall continually demonstrate that it is capable of protecting critical unclassified and classified information, and provide personnel to support Government security personnel. (PWS § 5.2a.) The contractor shall assist in the development and implementation of all day-to-day security procedures including information security, physical security, COMSEC, and Operations Security (OPSEC). (PWS § 5.2b.)

The contractor shall closely monitor changes to STIGs covering security requirements, identify requirements not being met, and assist the government in developing new processes and procedures as a result of updated or changed Accreditation Authority guidance. (PWS § 5.2c.) Also, the contractor shall implement modified processes and procedures to protect BMDS data and information at all times. (*Id.*)

The contractor shall assist the Government to develop and incorporate OPSEC guidance in day-to-day activities to mitigate security and program risks associated with the collection and analysis of MDA information by adversaries, and actions against the MDA mission and its personnel. (PWS § 5.2e.) The contractor shall implement MDA policies and procedure to maintain compliance with all applicable COMSEC guidance. (PWS § 5.2f.) The contractor shall design or procure, incorporate and operate security resources required to support the security requirements of ARC's programs, projects and assets. (PWS § 5.2g.)

The contractor shall implement practices to restrict unnecessary sharing and/or flow of Controlled Unclassified Information (CUI) down the entire supply chain based on need-to-know.

(PWS § 5.3b.) The contractor shall develop an Information Management and Control Plan (IMCP) that shall identify practices to restrict the unnecessary sharing and/or flow of CUI, address procedures for reporting a cyber-incident, and document the process by which System Security Plans and Plan of Action and Milestones are developed and maintained to protect CUI within the contractor's/subcontractor's unclassified IT systems. (PWS § 5.3c.)

CLIN 0004 Test Support

The contractor shall facilitate test asset hardware and software upgrades, design and implementation. (PWS § 6.1a.) The contractor shall develop and implement a configuration control process by which lockdown is implemented prior to a test event and rescinded after completion. (PWS § 6.1b.) The contractor shall provide infrastructure, network design and configuration design to meet test event and training requirements and issue resolution in support of Test, Integration Management, Test Execution Center (TEC) management, and Advance Training Operational Center training exercises. (PWS § 6.1c.) The contractor shall perform technical analysis to support design, development, integration, execution, and analysis of experiments, test, and exercises, and demonstrations of distributive software technology, real-time algorithms, and information assurance. (PWS § 6.1d.)

The contractor shall develop an automated system for test set-up and related configuration control. (PWS § 6.2.) The contractor shall support the test event certification process and ensure formal certification is received prior to test execution. The contractor shall develop Certification Data Packages of ARC assets to support formal ground tests. (PWS § 6.3.)

The contractor shall support BMDS Integration and Development testing in the TECs and ARC test assets; this includes risk reduction, software checkout, keep alive runs, and other non-IMTP events. (PWS § 6.4a.) The contractor shall provide video projection engineering and support for test execution and operator control rooms requiring situational awareness and visualization during IMTP testing or BMDS test and execution element checkouts. (*Id.*) The contractor shall configure Test Support System equipment to allow routing of situational awareness screens to the TECs. (PWS § 6.4b.) The contractor shall provide personnel to integrate Ground Based Midcourse (GM) defense and Sensor (SN) assets, act as test "conductor," and provide statistics on integration runs for GM and SN assets. (PWS § 6.4c.)

The contractor shall collect data for MDA test events, provide storage, and coordinate data collection. (PWS § 6.5.) The contractor shall design, develop and execute network scripts or other software for data collection, storage, and eventual dissemination of test data to the Missile Defense Data Center. (*Id.*)

CLIN 0005 Task Instructions - Real World Events

Performance under this Task Instruction (TI) Contract CLIN will be in support of activities for "real world" events such as analysis assigned to elements from external agencies to include Warfighter Request for Analysis/Requests for Real World Events/Urgent Unknowns. The contractor shall support any real world event identified by the Government and

perform by reprioritizing work and adjusting work schedules to ensure mission success. (PWS § 7.0.)

CLIN 0006 Task Instructions - Network Design

Performance under this TI Contract CLIN includes research and development/ engineering activities. (PWS § 8.0.) The contractor shall develop network scripts and new software tools. Software development includes designing, developing and implementing solutions to support CI/CAT through Rapid Reconfiguration of System Test Architectures; automated health and status tools compatible with the HWIL GT environment; and Independent Verification & Validation (IV&V) processes, systems, software or hardware to support the acceptance and integration of new BMDS elements into the ARC infrastructure. (PWS § 8.1a.) New elements could include additional HWIL assets, or new BMDS representation/HWIL assets such as new sensors, interceptors, and systems such as Patriot and Integrated Air and Missile Defense (IAMD). (*Id.*)

The contractor shall design, develop and prepare an Analysis of Alternatives (AoA) for Hardware and Software solutions for rapid reconfiguration to support improvements in system reconfiguration and Configuration Management necessary to support Agile Testing (Continuous Integration/Continuous Agile Testing). (PWS § 8.2a.) The contractor shall re-design network architecture to support increased data transmission for CI/CAT. (PWS § 8.2b.) The contractor shall design, develop and prepare an AoA to implement automated Health and Status and Configuration Control to tactical HWIL systems. (PWS § 8.3.) The contractor shall design, develop and prepare an IV&V suite of tools to support integration and acceptance of new BMDS assets delivered to the ARC. (PWS § 8.4.)

Under Network Design, the contractor shall design and implement a network engineering, management, and monitoring capability that encompasses all unclassified and classified networks in the ARC. (PWS § 8.5a.) The contractor shall design, develop and implement network designs in support of HWIL, test lab emulation, and cybersecurity. (PWS § 8.5b.) Network Design activities also include expansion and/or changes to existing network designs to: incorporate hardware and software solutions to integrate additional BMDS systems into the ARC infrastructure; incorporate new BMDS systems such as LRDR and HDR into BMDS representation; update the BMDS Independent and Development Lab (BID Lab) Architecture for inclusion of CI/CAT-related CDI; incorporate into the ARC architecture new BMDS design solutions to support Hypersonic Glide Vehicle, UAV platform, and Advance Tactical Aircraft; design and develop system architecture re-designs to support the Combined Test Center (CTC); and design and update the HWIL architecture to include existing BMDS assets such as IAMD and Patriot. (*Id.*)

RFP Attachment L-09 lists estimated percentages of Full Time Equivalents as follows:

CLIN	Activity	Percent
X001	Contract and ARC Management	15%
X002	Network Management	17%
X003	Cybersecurity	14%

X004	Test Support	12%
X005	Task Instructions - Real World Events	TBD
X006	Task Instructions - Network Design	41%

B. The Appeal

On September 11, 2018, Appellant filed the instant appeal. Appellant contends that NAICS code 541715 is inappropriate for this RFP because this is not a research and development procurement. Appellant urges OHA to conclude NAICS code 541513, Computer Facilities Management Services, with a $27.5 million annual receipts size standard, is the appropriate NAICS code for this RFP. (Appeal at 2.)

Appellant maintains that contracts to support or assist a research organization cannot be automatically deemed to be research and development procurements. (Appeal at 6, citing *NAICS Appeal of Delphi Research, Inc.*, SBA No. NAICS-5377 (2012), *aff'd sub nom. Arcata Assoc. v. U.S.*, 110 Fed. Cl. 290 (2013).) A research and development code is only appropriate if the contractor will directly perform work that is an integral part of research and development. (*Id.*) If the solicitation primarily seeks engineering, operations and computer support services, a research and development code is not appropriate. Multiple information technology efforts can reasonably be grouped under NAICS code 541513, and thus constitute the bulk of anticipated work. (*Id.*) Where a contractor will perform information technology support services, particularly the operation and maintenance of a network, the appropriate code is 541513. (*Id.*, citing *NAICS Appeal of Rollout Systems, LLC*, SBA No. NAICS-5901 (2018).)

Appellant maintains OHA has consistently rejected the appropriateness of NAICS code 541712 (541715's predecessor) in other procurements to support agency research and development efforts. (*Id.* citing *Size Appeal of Professional Project Services, Inc.*, SBA No. SIZ-5411 (2012); *NAICS Appeal of Bevilacqua Research Corp.*, SBA No. NAICS-5243 (2011); *NAICS Appeal of Information Ventures, Inc.*, SBA No. NAICS-4953 (2008).)

Appellant maintains that although MDA performs Research Development Test and Evaluation (RDT&E) activities, any actual research and development work is performed by other contractors through other contract vehicles. (Appeal at 7.) The work here is of a management and support nature. Any software development undertaken by this contractor is to facilitate RDT&E activities and not to participate in them. (*Id.*) The word "research" appears only once in the PWS, other than as part the terms Advanced Research Center or RDT&E. (*Id.*) Procurements classified under a research and development NAICS code must be research and development. (*Id.* at 7, citing *NAICS Appeal of Dayton T. Brown, Inc.*, SBA No. NAICS-5164 (2010).)

Appellant argues that this RFP tasks the contractor with the operation and maintenance of an environment to support testing, but has neither an integral nor an essential role in the actual testing, let alone any research and development. Therefore, NAICS code 541715 is inappropriate for this RFP. (*Id.* at 7-8.)

On the other hand, NAICS code 541513 describes establishments primarily engaged in on-site management and operation of their customers' computer systems. Here, CLIN 0006,

Network Design, is the single largest CLIN, making up an estimated 41% of the Full Time Equivalents (FTE) for the instant procurement. The required tasks are not research and development, but design and implementation of hardware and software solutions that support MDA. (*Id.* at 8.) Further, the labor categories required do not call for research scientists, development engineers or research managers, the type of positions necessary to conduct research and development activities. Rather, these categories, such as Cyber Security/Information Assurance Lead, Lead Engineer, Integration Management Lead, and Network Management/ Information Technology Lead Specialist, call for the skills required to manage the systems and facilities supporting MDA facility. (*Id.* at 8-9.)

C. CO's Response

On September 24, 2018, the CO responded to the appeal. She argues her designation of NAICS code 541715 is correct.

MDA's mission is to develop and field an integrated Ballistic Missile Defense System (BMDS). (Appeal at 1.) The BMDS is still in the development phase of the Department of Defense acquisition lifecycle, with elements of the BMDS continually being conceptualized, researched, tested, and developed. (*Id.* at 2.)

The Advanced Research Center (ARC) is a research, development, test and evaluation facility comprised of laboratories designed and operated to support BMDS Hardware-in-the Loop (HWIL) ground and flight test activities. HWIL is a technique used to develop and test complex real-time systems where real signals from a controller are connected to a test system that simulates reality, causing the controller to think it is in the assembled product. HWIL allows testing as though the real-world system were being used. ARC will include new BMDS elements as they are developed: Long-Range Discrimination Radar (LRDR), Medium Range Discrimination Radar-Pacific (MRDR-P). ARC also contains the Integrated System Test Capability Laboratory (ISTC) which will undergo redesign as part of Continuous Integration and Continuous Agile Testing (CI/CAT). The ARC brings these tactical and modeling and simulation assets together to create an accurate representation of BMDS to facilitate effective HWIL testing. (*Id.* at 4-5.)

The requirement for the contractor is to perform network and infrastructure design, development and maintenance of the test assets located in the ARC in a cybersecurity complaint environment. The contractor must maintain cybersecurity of the networks and perform lab asset management to realistically simulate BMDS' complex weapons systems in support of BMDS Ground Testing and BMDS Flight Risk Reduction activities. MDA is transitioning to a new ground test concept that includes CI/CAT. A thorough knowledge of the BMDS and the interdependency of these labs is required to manage these assets. (*Id.* at 5-6, citing PWS § 1.0, at 2.)

The CO asserts the RFP seeks proposals to support ARC's mission to provide the infrastructure and cybersecurity necessary to support BMDS HWIL and related Ground Testing

in a CI/CAT environment. The CO notes that the *NAICS Manual*[2] defines "research" as conducting original investigation undertaken on a systemic basis to gain new knowledge, and development as the application of research findings for the creation of new or significantly improved products or processes. (*Id.* at 7.) Further, Research and Development for guided missiles and space vehicles includes evaluations and simulations, and other services requiring a thorough knowledge of missiles and spacecraft. (*Id.* at 7-8.)

The CO asserts she made her NAICS code designation based upon the greatest percentage of contract value. (*Id.* at 8.) MDA conducted an analysis mapping each section of the PWS to the applicable NAICS codes. The codes were selected by the responses from industry to a Request for Information in FedBizOpps in April, 2016. More than two-thirds agreed that NAICS code 541715, Research and Development in in the Physical, Engineering and Life Sciences, was the appropriate code. (*Id.*) MDA concluded that NAICS code 541512, Computer Design Services, is intended for the one-time design and installation of a computer network, and not for the ARC's requirement for continuous design and development. (*Id.*) NAICS code 541413, Computer Facilities Management Services, does not address the preponderance of the scope of work and excludes the requirement to support guided missiles and sensor laboratories and test planning. (*Id.*) The CO did not select NAICS code 541330 (Engineering Services for Professional, Scientific and Technical Services) due to the reduction of engineering support services from the prior contract. (*Id.* at 8-9.)

The MDA team compared the PWS to NAICS code 541715. The PWS work includes the development of software tools, design and execution of rapid re-configurations in support of CI/CAT, cybersecurity testing, and design and integration of new test assets. Further, the CO maintains, the PWS requires a thorough knowledge of complete missile systems and spacecraft, specifically those contained in the BMDS. (*Id.* at 9.)

The CO further concluded that CLIN 0006 (PWS § 8.0), which addresses network design, comprises 41% of the work, the largest portion of the PWS. NAICS 541715 is the most appropriate code due to the research and development CLIN 0006 requires. The three other NAICS codes were each less than 17%. NAICS code 541715 represents the preponderance of work required. (*Id.* at 9-10.)

The CO argues that the contract requires a thorough knowledge of complete missiles and spacecraft. BMDS is extremely complex, requiring radars and sensors to track missiles and interceptors. The contractor must understand what BMDS is, the elements of BMDS (including missiles systems and spacecraft) and how MDA tests the BMDS in order to design and develop an appropriate network to conduct those tests. (*Id.* at 13.) The contractor must understand how systems such as LRDR work. Even the tasks under CLIN 0002 (PWS § 4), "Network Management" require a thorough understanding of missiles and BMDS. To properly perform tasks such as help desk support requires an understanding of BMDS, more than just basic Information Technology expertise. (*Id.* at 14.)

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[2] Executive Office of the President, Office of Management and Budget, *North American Industry Classification System-United States (2017)*, available at http://www.census.gov

The CO takes exception to Appellant's characterization of the tasks in CLIN 0006 as "design and implementation of hardware and software solutions" rather than research and development. (*Id.* at 15.) The CO maintains that "design and implementation of hardware and software solutions" is research and development. For the contractor to design and implement hardware and software solutions, it must conduct investigation to gain knowledge (research) and apply the findings of that research to create new or significantly improved products or processes (development). Further, the PWS requires this research and development involving computers, which is listed as one of the types of sciences covered by the code. (*Id.* at 15.) The Network Design Task Instruction (CLIN 0006) requires the contractor to conduct original investigation to gain knowledge and to use that to improve network design. Because CLIN 0006 constitutes the largest percentage of work, assigning NAICS code 541715 is not an error. (*Id.* at 16.)

The CO maintains the cybersecurity requirements also include research and development. The PWS imposes numerous cybersecurity requirements. Cybersecurity is a new field with new threats and vulnerabilities constantly emerging. Because of this, any cybersecurity solution the contractor creates will have to be the result of research and development. (*Id.* at 17, citing *NAICS Appeal of Technology Security Assoc., Inc.*, SBA No. NAICS-5950 (2018).)

The CO argues Appellant's reliance on *NAICS Appeal of Delphi Research, Inc.*, SBA No. NAICS-5377 (2012) is misplaced. There, the procurement at issue was to operate and maintain computer equipment, capture data and provide support for existing systems. This RFP requires the contractor to do much more. This contractor will have to investigate potential solutions and apply the findings, *i.e.*, research and development. (*Id.* at 17-18.) While other contractors are doing research and development work, Appellant's argument does not tell the complete story, because any new or updated element of the BMDS has to be studied and understood by the ARC contractor as to its impact on the ARC network. (*Id.* at 18.) The other contractors are not tasked with researching how the updates impact the ability to conduct HWIL testing in the ARC, all while ensuring continued cybersecurity compliance. (*Id.*) That task falls to the ARC contractor and requires research and development on its part to ensure an ARC capability that continues to replicate the BMDS and in which all elements communicate effectively, all while ensuring cybersecurity. (*Id.*)

The CO also takes issue with Appellant's argument that the labor categories required by the RFP do not call for job functions related to research and development. The labor categories Appellant points to are leadership categories that focus on management skills. The CO points to labor categories which do support research and development, such as Database Development Specialist, Software Development Specialist, Engineer, Cyber Security/IA Analyst. (*Id.* at 19-20, citing RFP Attachment L-10.) Appellant's proposed NAICS code, 541513, applies only to CLIN 0002, Network Management (PWS § 4.0), representing only 17% of the work. Thus, the appropriate code is 541715. (*Id.* at 20-21.)

D. *NAICS Manual* Descriptions

The NAICS code designated by the CO, 541715, Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology), covers:

> establishments primarily engaged in conducting research and experimental development (except nanotechnology and biotechnology research and experimental development) in the physical, engineering, and life sciences, such as agriculture, electronics, environmental, biology, botany, computers, chemistry, food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary and other allied subjects.

NAICS Manual at 476. The *NAICS Manual* defines "research" as "original investigation undertaken on a systematic basis to gain new knowledge," and "experimental development" as "the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes." *Id.* at 475.

> For NAICS code 541715, footnotes in the Size Standards table state that:

> "Research and Development" means laboratory or other physical research and development. It does not include economic, educational, engineering, operations, systems, or other nonphysical research; or computer programming, data processing, commercial and/or medical laboratory testing.

13 C.F.R. § 121.201, n.11(a).

> "Research and Development" for guided missiles and space vehicles includes evaluations and simulation, and other services requiring thorough knowledge of complete missiles and spacecraft.

13 C.F.R. § 121.201, n.11(d).

> The NAICS code Appellant advocates, 541513, Computer Facilities Management Services, covers:

> establishments primarily engaged in providing on-site management and operation of clients' computer systems and/or data processing facilities. Establishments providing computer systems or data processing facilities support services are included in this industry.

NAICS Manual, at 470. Index entries which refer to this NAICS code are: "Computer systems facilities (*i.e.*, clients' facilities) management and operation services"; "Data processing facilities (*i.e.*, clients' facilities) management and operation services"; "Facilities (*i.e.*, clients' facilities) management and operation services, computer systems or data processing"; and "Facilities (*i.e.*, clients' facilities) support services, computer systems or data processing." *Id.* at 716, 730, 753.

III. Discussion

A. Standard of Review

Appellant has the burden of proving, by a preponderance of the evidence, all elements of its appeal. Specifically, Appellant must show that the CO's NAICS code designation is based upon a clear error of fact or law. 13 C.F.R. § 134.314; *NAICS Appeal of Durodyne, Inc.*, SBA No. NAICS-4536, at 4 (2003). SBA regulations do not require the CO to select the perfect NAICS code. *NAICS Appeal of Evanhoe & Assocs., LLC*, SBA No. NAICS-5505, at 14 (2013). Rather, the CO must assign the NAICS code that best describes the principal purpose of the product or service being acquired in light of the industry descriptions in the *NAICS Manual*, the description in the solicitation, the relative value and importance of the components of the procurement making up the end item being procured, and the function of the goods or services being acquired. FAR 19.303(a)(2); 13 C.F.R. § 121.402(b). A procurement is usually classified according to the component that accounts for the greatest percentage of contract value. (*Id.*) OHA will not reverse a NAICS code designation "merely because OHA would have selected a different code." *NAICS Appeal of Eagle Home Med. Corp.*, SBA No. NAICS-5099, at 3 (2009).

B. Analysis

Having reviewed the RFP, the descriptions in the *NAICS Manual*, OHA's prior decisions, and the arguments of the parties, I conclude that the CO's NAICS code designation is correct.

As discussed above, the *NAICS Manual* states that NAICS code 541715 is appropriate for procurements that involve "research and experimental development . . . in the physical, engineering, and life sciences. . . ." Section II.D, *supra*. The *NAICS Manual* defines "research" as "original investigation undertaken on a systematic basis to gain new knowledge," and "experimental development" as "the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes." *Id.* Applying these provisions, OHA has long held that procurements classified under a research and development NAICS code "must be for research and development, and thus must look to creating new processes or products." *NAICS Appeal of Dayton T. Brown, Inc.*, SBA No. NAICS-5164, at 5 (2010) (emphasis in original).

However, in Footnote 11(d), the regulation provides that research and development for guided missiles and space vehicles includes "evaluations and simulation, and other services requiring thorough knowledge of missiles and spacecraft." Therefore, research and development for guided missiles and space vehicles includes evaluations and simulation, and other unspecified services requiring thorough knowledge of complete missiles and spacecraft. The categorization of procurements as research and development is therefore not as strict as it is in other disciplines. In the complex world of missiles and spacecraft, research and development may be viewed more expansively than in traditional disciplines. *NAICS Appeal of Millennium Engineering and Integration Co.*, SBA No. NAICS-5309, at 11-12 (2011). Thus, an RFP which requires evaluations and simulations involving missiles and similar devices, as well as a thorough knowledge of these technologies, may be designated under the NAICS 541715, under the Guided Missiles and Space Vehicles exception. *NAICS Appeal of DCS Corp.*, SBA No. NAICS-5703, at

4 (2016); *see also NAICS Appeal of Inklings Media Co.*, SBA No. NAICS-4850, at 6 (2007); *NAICS Appeal of IT Research Corp.*, SBA No. NAICS-4499, at 4 (2002).

Here, the ARC is an RDT&E facility to support the BMDS HWIL testing. The BMDS is an extraordinarily complicated and sophisticated undertaking, compared to "hitting a bullet with a bullet." The lab assets include the hardware and software necessary for guided missiles and space vehicles. This contract will expand these systems to include new sensors and tactical systems ARC designs, and development to integrate new programs into the BMDS. The contractor will be servicing the necessary modeling and simulation equipment. The RFP states "A thorough knowledge of the BMDS" is required to perform this contract and to manage these assets. Therefore, this RFP explicitly requires services involving evaluations and simulation of missiles, requiring a thorough knowledge of missiles, and thus fits into the description of the NAICS exception in Footnote 11(d).

The contractor is required to develop new tools and processes to respond to changes required by the results of testing. The contractor will participate in the system design activities to implement improvements to CI/CAT, asset management and all of MDA's data flow. CLIN 0006 — Network Design represents the largest portion of this contract, with 41% of FTEs to be worked. This CLIN includes research and development of the software which will be an integral part of the essential simulations to support the BMDS. The contractor's work will include original investigation, or research, to obtain necessary knowledge to develop the AoA for hardware and software solutions necessary to support the CI/CAT. I conclude the CO was correct in characterizing this CLIN as research and development.

CLIN 0004 — Test Support requires the contractor to collect data for MDA test events. This constitutes original investigation, or research, and is necessary for the support of MDA. The contractor must further use this research to develop software and systems to support the tests and simulations for BMDS. Footnote 11(d) characterizes evaluations and simulation as part of research and development. Again, I conclude this portion of the PWS supports a research and development designation.

CLIN 0003 — Cybersecurity requires the contractor not merely to control access to ARC's information systems, but also to implement a cybersecurity program for all the networks. The contractor must continually monitor changes to cybersecurity requirements, identify requirements not met, and develop new processes and procedures to deal with those requirements. It is worth noting here that cybersecurity is a relatively new industry, in which new threats and vulnerabilities are constantly emerging. Therefore, once investigated and created, new cyber tools, standards, processes and method must be continually refined, tested and improved. OHA has found that a procurement for cyber warfighting capabilities was properly designated as a Research and Development procurement, because the new cyber tools must be created in the first instance, even if the procurement did not specifically call for laboratory research. *NAICS Appeal of Technology Security Assoc., Inc.*, SBA No. NAICS-5950, at 12 (2018). Here, I find that CLIN 0003 supports a research and development designation.

I therefore conclude that this RFP requires the contractor to engage in original investigation, or research to obtain the necessary knowledge to develop the software and

hardware to support the testing and simulation of the BMDS program, and it requires the contractor have a thorough knowledge of the program to perform the procurement. Accordingly, I find that CO properly designated this RFP under NAICS code 541715, Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology), under the Guided Missiles and Space Vehicles exception, with a corresponding 1,250 employee size standard, and that Appellant has failed to meet its burden of establishing that the CO's designation was based upon clear error of fact or law.

Because Appellant has not established that NAICS code 541715 is clearly erroneous for this RFP, it is unnecessary to consider the NAICS code Appellant advocates. OHA will not assign a different NAICS code to a procurement unless the CO's NAICS code classification is shown to be clearly erroneous. *NAICS Appeal of Technology Security Assoc., Inc.*, SBA No. NAICS-5950, at 14 (2018). Even if I were to do so, Appellant's choice is not supported by the record here. Appellant relies upon cases such as *NAICS Appeal of Delphi Research, Inc.*, SBA No. NAICS-5377 (2012), *aff'd sub nom. Arcata Assoc. v. U.S.* 110 Fed. Cl. 290 (2013) in support of its argument that this procurement is only for IT services. But in *Delphi Research*, the procurement merely called for the operation and maintenance of existing computer systems. This RFP requires a great deal more than that. It requires the contractor not only to manage ARC's IT network, but also to work as an integral part of the testing and simulation that are part of the research and development of the BMDS.

IV. Conclusion

Appellant has the burden of proving that the CO committed a clear error of fact or law in designating NAICS code 541715 for this procurement and has failed to meet its burden. For that reason, I AFFIRM the CO's NAICS code designation and find the appropriate NAICS code for this procurement is 541715, Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology), under the Guided Missiles and Space Vehicles exception, with a corresponding 1,250 employee size standard, and I DENY the instant appeal.

This is the final decision of the Small Business Administration. *See* 13 C.F.R. § 134.316(d).

CHRISTOPHER HOLLEMAN
Administrative Judge