

SEAKR ENGINEERING, LLC FLOW DOWN CLAUSES APPLICABLE TO SALES CONTRACT #D2332

Document No. **MS059**, Rev. 0

MUOS SLE Phase 1 (FA880723R0005)

Lockheed Martin has not yet received a definitive subcontract; therefore, this is a preliminary contract flow-down document. Clauses may be added to this document upon Lockheed Martin's negotiations of a definitive subcontract.

Where necessary, to identify the applicable parties under the following clauses, "Contractor" shall mean "Seller," "Contracting Officer" shall mean "Lockheed Martin Procurement Representative," "Contract" means this subcontract and "Government" means "Lockheed Martin." However, the words "Government" and "Contracting Officer" do not change: (1) when a right, act, authorization or obligation can be granted or performed only by the Government or the Prime Contract Contracting Officer or duly authorized representative, including but not limited to (i) audit rights to Seller's proprietary business records or (ii) any indemnification or limitation of liability obligation, which obligation shall remain with the Government; (2) when title to property is to be transferred directly to the Government, and (3) when the Government is granted ownership or other rights to Seller's intellectual property or technical data.

Full-Text Clauses

SMC--K002 SPACE CONTRACTOR RESPONSIBILITY WATCH LIST (CRWL) (MAR 2023)

Space Contractor Responsibility Watch List (CRWL).

In accordance with Section 1612 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2018 (P.L. 115-91) and SSC Instruction (SSCI) 64-101, the contracting officer may not award a contract to a contractor included on the CRWL without making a determination of responsibility and obtaining the approval of the SSC Commander. A contractor that has been notified that it has been added to the CRWL may respond to this solicitation but must submit documentation in this volume describing how it has addressed the conditions that resulted in its inclusion on the CRWL and why those conditions will not impact performance on a contract resulting from this solicitation. The Contracting Officer will consider this information as well as other available information in making the determination of responsibility or nonresponsibility required by FAR 9.103.

In addition, in accordance with Section 1612 of the NDAA for FY18 (P.L. 115-91), SSCI 64-101, and either 52.212-4 (if commercial) or the SSC Class Deviation of FAR clause 52.244-2, Subcontracts (if noncommercial), in this solicitation, the offeror must receive written consent of the Contracting Officer prior to subcontracting with any contractor on the CRWL for any subcontract valued in excess of \$3M or 5% of the prime contract value, whichever is lesser. The Contracting Officer may not provide this consent without obtaining the approval of the SSC Commander. Offerors must inform proposed subcontractors that the proposed subcontractors must notify the offeror if the proposed subcontractors have been notified by the SSC Commander that they have been included on the CRWL. In order to be

considered for a subcontract, a proposed subcontractor that has been notified that it has been added to the CRWL must submit documentation describing how it has addressed the conditions that resulted in its inclusion on the CRWL and why those conditions will not impact its performance on a subcontract to a contract resulting from this solicitation. The proposed subcontractor may submit CRWL-related documentation through the offeror or directly to the Contracting Officer as long as the information is received prior to the proposal due date. In addition, the offeror must submit its determination of subcontractor responsibility in this volume.

The Contracting Officer will consider information provided by the offeror and the proposed.

Enabling Clause for Prime and Support Contractor Relationships

11.1 Enabling Requirements for SSC Program Contracts Requiring Interface with Aerospace FFRDC Contract Support

11.1.1 Overview. This contract covers part of a program which is under the general program management of the United States Space Force Space Systems Command (SSC). SSC has entered into a contract with The Aerospace Corporation, a California nonprofit corporation operating a Federally Funded Research and Development Center (FFRDC), for the services of a technical group that will support the program office by performing General Systems Engineering and Integration (GSE&I), Technical Review (TR), and/or Technical Support (TS), and informing the commander or director of the relevant organizations and programs it supports of product or process defects and other relevant information.

11.1.1.1 GGSE&I. This function involves overall system definition; integration both within the system and with associated systems; analysis of system segment and subsystem design; design compromises and tradeoffs; definition of interfaces; review of hardware and software, including manufacturing and quality control; observation, review and evaluation of tests and test data; support of launch, flight test, and orbital operations; assessment of the contractors' technical performance through meetings with contractors and subcontractors, exchange and analysis of information on progress and problems; review of plans for future work; developing solutions to problems; technical alternatives for reduced program risk; providing written comments and recommendations to the applicable Program Manager and/or Project Officer as an independent technical assessment for consideration for modifying the program or redirecting the contractor's efforts; all to the extent necessary to assure timely and economical accomplishment of program objectives consistent with mission requirements.

11.1.1.2 TR. This function includes the process of appraising the technical performance of the contractor through meetings, exchanging information on progress and problems, reviewing reports, evaluating presentations, reviewing hardware and software, witnessing and evaluating tests, analyzing plans for future work, evaluating efforts relative to contract technical objectives, and providing comments and recommendations in writing to the applicable Program Manager and/or Project Officer as an independent technical assessment for consideration for modifying the program or redirecting the contractor's efforts to assure timely and economical accomplishment of program objectives.

11.1.1.3 TS. This function involves broad areas of specialized needs of customers for planning, system architecting, research and development, horizontal engineering, or analytical activities for which The Aerospace Corporation is uniquely qualified by virtue of its specially qualified personnel, facilities, or corporate memory. The categories of TS tasks are: Selected Research, Development, Test and

Evaluation; Plans and System Architecture; Multi-Program Systems Enhancement; International Technology Assessment; and Acquisition Support.

11.1.2 Contractor requirement. In the performance of this contract, the contractor agrees to cooperate with The Aerospace Corporation by: 1) responding to invitations from authorized U. S. Government personnel to attend meetings; 2) providing access to technical information and research, development planning data such as, but not limited to, design and development analyses, test data and results, equipment and process specifications, test and test equipment specifications and procedures, parts and quality control procedures, records and data, manufacturing and assembly procedures, and schedule and milestone data, all in their original form or reproduced form and including top-level life cycle cost* data, where available; 3) delivering data as specified in the Contract Data Requirements List; 4) discussing technical matters relating to this program; 5) providing access to contractor facilities utilized in the performance of this contract; 6) and allowing observation of technical activities by appropriate technical personnel of The Aerospace Corporation. The Aerospace Corporation personnel engaged in GSE&I, TR, and/or TS efforts: (i) are authorized access to all such technical information (including proprietary information) pertaining to this contract and may discuss and disclose it to applicable personnel in a program office; (ii) are authorized to discuss and disclose such technical information (including proprietary information) to the commander or director of the relevant organizations and programs; and (iii) Aerospace shall make the technical information (including proprietary information) available only to its Trustees, officers, employees, contract labor, consultants, and attorneys who have a need to know.

11.1.3 Subcontractor Requirement. The contractor further agrees to include in all subcontracts a requirement requiring compliance by subcontractor and supplier and succeeding levels of subcontractors and suppliers with the response and access and disclosure provisions of this Enabling Requirement, subject to coordination with the contractor, except for subcontracts for commercial items or commercial services. This agreement does not relieve the contractor of its responsibility to manage the subcontracts effectively and efficiently nor is it intended to establish privity of contract between the Government or The Aerospace Corporation and such subcontractors or suppliers, except as indicated below.

11.1.4 Master Non-disclosure Agreement. The Aerospace Corporation shall protect the proprietary information of contractors, subcontractors, and suppliers in accordance with its Master Non-disclosure Agreement, a copy of which is available upon request. This Master Non-disclosure Agreement satisfies the Nondisclosure Agreement requirements set forth in 10 U.S.C. §2320 (f)(2)(B), and provides that such contractors, subcontractors, and suppliers are intended third-party beneficiaries under the Master Non-disclosure Agreement and shall have the full rights to enforce the terms and conditions of the Master Non-disclosure Agreement directly against The Aerospace Corporation, as if they had been signatory party hereto. Each such contractor, subcontractor, or supplier hereby waives any requirement for The Aerospace Corporation to enter into any separate company-to-company confidentiality or other non-disclosure agreements.

11.1.5 Aerospace shall make the technical information (including proprietary information) available only to its Trustees, officers, employees, contract labor, consultants, and attorneys who have a need to know, and Aerospace shall maintain between itself and the foregoing binding agreements of general application as may be necessary to fulfill their obligations under the Master Non-disclosure Agreement referred to herein, and Aerospace agrees that it will inform contractors, subcontractors, and suppliers if it plans to use consultants, or contract labor personnel and, upon the request of such contractor,

subcontractor, or supplier, to have its consultants and contract labor personnel execute non-disclosure agreements directly therewith.

11.1.6 Technical Direction. The Aerospace Corporation personnel are not authorized to direct the contractor in any manner. Technical direction under this contract will be provided to the contractor solely by SSC.

11.2 Enabling Requirements for SSC Program Contracts Requiring Interface with MITRE NSEC FFRDC Contract Support

11.2.1 Overview. This contract covers part of a program which is under the general program management of the United States Space Force Space Systems Command (SSC). Air Force Materiel Command has entered into a contract with The MITRE Corporation National Security Engineering Center (NSEC), a Federally Funded Research and Development Center (FFRDC), which provides agencies with a broad range of engineering support and expertise. The engineering support provided falls within five core function areas of Architecture Development and Engineering Analysis, Technical Strategy, Program Strategy, Program Execution, and Enterprise Systems Engineering.

11.2.2 Architecture Development and Engineering Analysis. Enterprise, system and service architecture planning, development, and analysis includes broad concept studies, identification of improvement opportunities, and preparation of implementation roadmaps. Particular emphasis is placed on transformational approaches, interoperability, and joint U.S., multi-agency, and multinational operations. Reference designs are created for purposes of analysis and program planning. Integration management includes independent analysis and evaluation of the internal and external interfaces of systems and overarching national security systems and enterprise systems interoperability. It encompasses analyses of the interaction among associated systems, including issues of performance and security arising from these interactions.

11.2.3 Technical Strategy. Mission and threat analysis includes analysis of existing and potential missions and threats, to support the development of products and processes for operational use. It also includes independent analysis and exploitation of intelligence products, and the preparation of threat assessment packages tailored to life cycle needs. Technology requirements, applications, and research include assessments of the state-of-the-art, the state-of-the-practice, and technological opportunities. Technology alternatives and assessments of technology risks are analyzed in relation to program needs, security, and the system-of-systems behaviors within which a program will fit. Specialized in-depth analysis of potential improvements in critical system technologies is conducted on a selective basis, making use of prototyping of hardware and/or software when necessary. Strategies are developed to insert improved technology into the national security system-of-systems, and to integrate legacy systems for the conduct of more effective joint and multiagency operations. Mission-oriented investigation and experimentation activities are accomplished to develop approaches, explore concepts and prove feasibility.

11.2.4 Program Strategy. Operational requirements analysis and evaluation include iterative requirements analysis and flow-down (in close cooperation with the cognizant organization), matching program technical requirements with mission requirements (in the context of joint, multi-agency, and multinational operations), resolution of conflicting requirements, and evaluation of the degree of mission accomplishment in either a simulated or planned operational environment. Acquisition planning, preparation, and evaluation include support for the solicitation documents (source selection plan, request for proposal, statement of work, technical requirements, work breakdown structure, etc.)

and provision of technical advisors to source selection. Specific activities include evaluation of proposals and required documentation submitted by a contractor or prospective contractor, as well as the identification and analysis of potential problems, in order to assess risks associated with competing concepts or designs. Program systems engineering includes program planning, analysis and insight into subsystem and system design and integration, requirements flow-down, design performance, and cost trades. The NSEC FFRDC conducts cost analysis to the level needed to accomplish design tradeoffs and evaluate alternative technical approaches in the performance of its assigned role. Program strategy must consider cross-system integration and interoperability, lessons learned from other programs, and technology commonality. Independent analysis and evaluation of systems interfaces and functions may be required to assure system integrity, security and reliability.

11.2.5 Program Execution. Systems engineering performance analysis and assessment including the continuing verification of anticipated and actual achievement of key technical parameters within schedule and cost targets. It is expected that this function will provide independent analysis and identification of potential risks and how to avoid them before they arise, as well as identification of opportunities that may increase the likelihood of success, based on a broad and deep knowledge of the entire mission area. Support for both formal and informal technical reviews, whether conducted incrementally or at program, milestone and design decision points, or in response to special difficulties, is included. This support includes reviews of deliverables; independent analysis; reviews to assure readiness for testing or production; and planning, conduct and assessment of testing.

11.2.6 Enterprise Systems Engineering. Systems engineering and strategy support at the enterprise level with consideration of resiliency, systems of systems, affordability, and accelerated capability delivery. In addition, this function distills and analyzes the technical underpinnings of information sharing and architecture to develop the transport, enterprise services, data, application, and mission assurance design tenets for the national security enterprise. It encompasses conceiving, and guiding new approaches to mission application problems, both to offer solutions and to advance integrated enterprise operations. Enterprise design tenets are used to support systems engineering and guide the development of national security systems, and for integrating the current systems and services into the enterprise. This function includes the prototyping and integration of capabilities that will leverage the evolving enterprise infrastructure and help influence the vision and design tenets.

11.2.7 Contractor requirement. In the performance of this contract, the contractor agrees to cooperate with The MITRE Corporation by: 1) responding to invitations from authorized U. S. Government personnel to attend meetings; 2) providing access to technical information and research, development planning data such as, but not limited to, design and development analyses, test data and results, equipment and process specifications, test and test equipment specifications and procedures, parts and quality control procedures, records and data, manufacturing and assembly procedures, and schedule and milestone data, all in their original form or reproduced form and including top-level life cycle cost* data, where available; 3) delivering data as specified in the Contract Data Requirements List; 4) discussing technical matters relating to this program; 5) providing access to contractor facilities utilized in the performance of this contract; 6) and allowing observation of technical activities by appropriate technical personnel of The MITRE Corporation. The MITRE Corporation personnel engaged in Architecture Development and Engineering Analysis, Technical Strategy, Program Strategy, Program Execution, and Enterprise Systems Engineering efforts: (i) are authorized access to all such technical information (including proprietary information) pertaining to this contract and may discuss and disclose it to applicable personnel in a program office; (ii) are authorized to discuss and disclose such technical information (including proprietary information) to the commander or director of the relevant

organizations and programs; and (iii) MITRE shall make the technical information (including proprietary information) available only to its Trustees, officers, employees, contract labor, consultants, and attorneys who have a need to know.

11.2.8 Subcontractor Requirement. The contractor further agrees to include in all subcontracts a requirement requiring compliance by subcontractor and supplier and succeeding levels of subcontractors and suppliers with the response and access and disclosure provisions of this Enabling Requirement, subject to coordination with the contractor, except for subcontracts for commercial items or commercial services. This agreement does not relieve the contractor of its responsibility to manage the subcontracts effectively and efficiently nor is it intended to establish privity of contract between the Government or The MITRE Corporation and such subcontractors or suppliers, except as indicated below.

11.2.9 Organizational Conflict of Interest. The MITRE Corporation contract contains an organizational conflict of interest clause that requires the Contractors to protect data and proprietary information and prohibits the Contractors from using the data and proprietary information for any purpose other than that for which the data was presented.

11.2.10 Technical Direction. The MITRE Corporation personnel are not authorized to direct the contractor in any manner. Technical direction under this contract will be provided to the contractor solely by SSC.

11.3 Enabling Requirements for SSC Program Contracts Requiring Interface with Johns Hopkins University Applied Physics Laboratory (JHU/APL) University Affiliated Research Center (UARC).

11.3.1 Overview. This contract covers part of a program which is under the general program management of the United States Space Force Space Systems Command (SSC). Naval Sea Systems Command has entered into a contract with the Johns Hopkins University Applied Physics Laboratory (JHU/APL) University Affiliated Research Center (UARC), which provides critical DoD areas of support that include, but are not limited to, missiles, radar, sonar, space, undersea warfare, command, control and communication (C3), intelligence, surveillance, and reconnaissance (ISR), anti-air warfare, strike warfare, electronic warfare, information warfare, complex combat systems and the characteristics and limitations unique to the operating environment of DOD systems. The JHU/APL has developed core competencies in research, development, test, and evaluation, systems innovations, integration, and engineering in support of the DOD's warfighting capabilities. The specific core competencies are provided as follows:

11.3.2 Strategic Systems Test and Evaluation. Independent quantitative performance evaluations of complex operational systems including ballistic and guided missile systems, strategic and tactical C3 systems, and other related combat and weapon systems; evaluation of alternative and modified systems; collection of requisite data; and development of instrumentation, as appropriate.

11.3.3 Submarine Security and Survivability. Investigation and assessment of anti-submarine warfare, unmanned undersea vehicles, mine countermeasure technologies, and other aspects of undersea warfare with emphasis on the security, survivability, and operational effectiveness of submarines; instrumentation and oceanographic sensor development; and the execution of experiments and oceanographic research.

11.3.4 Space Science and Engineering. Design, development, and prototyping of space systems and instruments; conduct of critical space experiments; analysis and evaluation of space systems and space-related data; and research and development of systems that provide precision tracking, location, navigation, remote sensing, communication, characterization of the space environment, situational awareness, accurate discrimination, and targeting of threat objects.

11.3.5 Combat System and Guided Missiles. Detailed understanding of tactical combat system and guided missile (including air defense and strike missiles) system design necessary for the independent evaluation of current and future systems, and the research and development of concepts and techniques for system improvements; development and maintenance of unique evaluation and development facilities; design and prototyping of systems; relating systems design to operational factors (e.g., targeting and mission planning); and conducting related analyses and tests, including full-scale experiments.

11.3.6 Theater Air Defense and Power Projection. Research, development, and assessment of effective methods of coordinating warfare systems at the theater level by exploring system concepts, developing demonstration models, and conducting experiments; systems engineering and evaluation of electronic warfare and defense suppression systems; and assistance in planning and evaluation of C3 systems for attaining an integrated tactical and strategic system capability.

11.3.7 Information Technology (C4ISR/IO). Research, development, and assessment of defense command, control, communications, computer, intelligence, surveillance, reconnaissance, information operations, cyber operations, and information technologies; application of these technologies to battlefield information management, intelligence systems and information warfare systems; operational evaluations and vulnerability assessments of current and planned systems; development of system architectures to improve intelligence systems and to improve the effectiveness and coordination and reduce vulnerability among forces; and demonstrations and testing of these systems.

11.3.8 Simulation, Modeling, and Operations Analysis. Development, verification, validation and application of simulations, models, and operations analysis techniques to determine mission effectiveness and performance assessment of current, planned, and proposed systems; and coordination of employment of these systems.

11.3.9 Mission-Related R&D. Mission related and public service-oriented research, technology development, test, evaluation, and system analysis (e.g., biomedicine, special operations capabilities, defeat of CBRNE weapons, environment and other topics of importance to DOD) through the application of the above core competencies, along with the complementary capabilities of other divisions of the University.

11.3.10 Contractor Requirement. In the performance of this contract, the contractor agrees to cooperate with the Johns Hopkins University Applied Physics Laboratory (JHU/APL) by: 1) responding to invitations from authorized U. S. Government personnel to attend meetings; 2) providing access to technical information and research, development planning data such as, but not limited to, design and development analyses, test data and results, equipment and process specifications, test and test equipment specifications and procedures, parts and quality control procedures, records and data, manufacturing and assembly procedures, and schedule and milestone data, all in their original form or reproduced form and including top-level life cycle cost* data, where available; 3) delivering data as specified in the Contract Data Requirements List; 4) discussing technical matters relating to this

program; 5) providing access to contractor facilities utilized in the performance of this contract; 6) and allowing observation of technical activities by appropriate technical personnel of JHU/APL. The JHU/APL personnel engaged in Architecture Development and Engineering Analysis, Technical Strategy, Program Strategy, Program Execution, and Enterprise Systems Engineering efforts: (i) are authorized access to all such technical information (including proprietary information) pertaining to this contract and may discuss and disclose it to applicable personnel in a program office; (ii) are authorized to discuss and disclose such technical information (including proprietary information) to the commander or director of the relevant organizations and programs; and (iii) JHU/APL shall make the technical information (including proprietary information) available only to its Trustees, officers, employees, contract labor, consultants, and attorneys who have a need to know.

11.3.11 Subcontractor Requirement. The contractor further agrees to include in all subcontracts a requirement requiring compliance by subcontractor and supplier and succeeding levels of subcontractors and suppliers with the response and access and disclosure provisions of this Enabling Requirement, subject to coordination with the contractor, except for subcontracts for commercial items or commercial services. This agreement does not relieve the contractor of its responsibility to manage the subcontracts effectively and efficiently nor is it intended to establish privity of contract between the Government or JHU/APL and such subcontractors or suppliers, except as indicated below.

11.3.12 Organizational Conflict of Interest. The JHU/APL contract contains an organizational conflict of interest clause that requires the Contractors to protect data and proprietary information and prohibits the Contractors from using the data and proprietary information for any purpose other than that for which the data was presented.

11.3.13 Technical Direction. JHU/APL personnel are not authorized to direct the contractor in any manner. Technical direction under this contract will be provided to the contractor solely by SSC.

11.4 Enabling Requirements for SSC Program Contracts Requiring Interface with Massachusetts Institute of Technology Lincoln Laboratory (MIT-LL) FFRDC Contract Support.

11.4.1 Overview. This contract covers part of a program which is under the general program management of the United States Space Force Space Systems Command (SSC). Air Force Materiel Command has entered into a contract with the Massachusetts Institute of Technology Lincoln Laboratory (MIT-LL) Federally Funded Research and Development Center (FFRDC), which provides critical DoD areas of research and development in the mission areas of advanced technology, air and missile defense technology, communications systems, space control, air defense, tactical systems, homeland protection, air traffic control, cyber security and information sciences, and intelligence, surveillance, and reconnaissance (ISR) systems and technology.

11.4.2 Space Systems and Technology. The Space Systems and Technology mission area conducts research and development to detect, track, and identify man-made satellites; assess payload and satellite mission; and make improvements for monitoring space weather and atmospheric and ionospheric effects. The Space Control mission develops technology that enables the nation's space surveillance system to meet the challenges of space situational awareness. This includes both space-based and ground-based surveillance systems, advanced system analyses, and the development of advanced sensor concepts and technology. The technology emphasis is the application of new components and algorithms to enable sensors with greatly enhanced capabilities and to support the development of net-centric processing systems for the nation's Space Surveillance Network.

11.4.3 Air, Missile, and Maritime Defense Technology. The Air, Missile, and Maritime Defense Technology mission area conducts research and development to assess integrated systems for defense against ballistic missiles, cruise missiles, and air and maritime vehicles in tactical, theater, strategic, regional, and homeland defense applications. Activities include the investigation of system architectures, development of advanced sensor and decision support technologies, development of flight-test hardware, extensive field measurements and data analysis, verification and assessment of deployed system capabilities, and assist with development and/or support upgrades of undersea defense systems. A strong emphasis is on rapidly prototyping sensor and system concepts and algorithms, utilizing advanced technology to improve the integrated system for defense, and on transferring resulting technologies to Government, industry, and other laboratories responsible for developing operational systems.

11.4.4. Communication Systems. The Communication Systems mission area conducts research and development to enhance and protect the capabilities of the nation's global defense networks. Emphasis is placed on synthesizing system architectures, developing component technologies, building and demonstrating end-to-end system prototypes, and transferring this technology to industry for deployment in operational systems. Current efforts span all network layers (from physical to application), with primary focuses on radio-frequency military satellite communications, free-space laser communications, and line-of-sight networking. The main goals of this mission area are to enhance the capacity, interoperability, and robustness of the national global communications network, for a wide variety of applications, including high-data-rate trunking and sensor readout, tactical protected communication and networking, and applications involving disadvantaged users. Particular attention is paid to experimentally verifying new architectures and technology developments under realistic operating conditions in support of current and emerging operational concepts.

11.4.5 Cyber Security and Information Sciences. The Cyber Security and Information Sciences mission area conducts research, development, evaluation, and deployment of prototype components and systems designed to improve the security of computer networks, hosts, and applications. A particular focus is the intersection between the MIT-LL's traditional mission areas and the cyber domain. Efforts include cyber analysis; creation and demonstration of robust architectures that can operate through cyber-attacks; development of prototypes that demonstrate the practicality and value of new techniques for cryptography, cyber sensing, automated threat analysis, antitamper systems, and malicious code detection; demonstrations of the impact of cyber on traditional kinetic systems; quantitative, repeatable evaluation of these prototypes; and deployment of prototype technology to national-level exercises and operations.

11.4.6 Intelligence, Surveillance, and Reconnaissance (ISR) Systems and Technology. The Intelligence, Surveillance, and Reconnaissance Systems and Technology mission area conducts research and development in advanced sensing concepts, signal and image processing, automatic target classification, networked sensor architectures, high performance computing, decision support systems, and decisions sciences. By leveraging these disciplines, the MIT-LL produces novel ISR system concepts for both surface and undersea surveillance applications. Sensor technology for ISR includes passive and active electro-optical systems, surface surveillance radar, radio-frequency geolocation, and undersea acoustic surveillance. Increasingly, the work extends from sensors and sensor platforms to include the processing, exploitation, and dissemination architectures that connect sensors to operational users. Prototype ISR systems developed from successful concepts is then transitioned to

industry and the user community. Work in this mission area also involves phenomenology analysis, component technology development, system design, field experimentation, and user connectivity.

11.4.7 Advanced Technology. The Advanced Technology mission area focuses on research and development in the area of invention of new device concepts, the practical realization of those concepts, and their integration into subsystems. Although many of these devices continue to be based on solid-state electronic or electro-optical technologies, recent work is highly multidisciplinary, and current devices increasingly exploit biotechnology and innovative chemistry. The broad scope of Advanced Technology work includes the development of unique high-performance detectors and focal planes, 3D integrated circuits, biological and chemical agent sensors, diode lasers and photonic devices using compound semiconductors and silicon-based technologies, microelectromechanical devices, RF technology, and unique lasers including high-power fiber and cryogenic lasers. This mission area supports the department of Defense and broader national security community by identifying new phenomenology that can be exploited in novel system applications, and by developing the revolutionary advances in subsystem and component technologies that allow key, new system capabilities. It is the continuing vision of the Advanced Technology mission to provide the breakthroughs in phenomenological understanding and revolutionary advances in subsystem and component technologies that enable novel sensing, computation, and communication systems to address the most challenging national security concerns.

11.4.8 Tactical Systems. The Tactical Systems mission area conducts research and development to assist the Department of Defense to improve the acquisition and employment of various weapons systems, including tactical air and counterterrorist systems. In this mission area, the MIT-LL supports the Department of Defense with assessments, innovation, and rapidly developed prototype capabilities. Activities focus on a combination of systems analysis to assess technology impact in operationally relevant scenarios, rapid development and instrumentation of prototype U.S. and threat systems, and detailed, realistic, instrumented testing. A tight coupling between the MIT-LL's efforts and the DoD sponsors and warfighters involved in these efforts ensures that these analyses and prototype systems are relevant and beneficial to the warfighter.

11.4.9 Homeland Protection. The Homeland Protection mission area focuses on research and development in supporting the DoD in both its homeland defense mission to protect the United States against aggression and in its homeland security mission to support civilian lead federal agencies. Homeland defense activities include air, land and maritime defense. The Homeland Protection mission area develops technology and systems to prevent terrorist attacks, to reduce vulnerability to terrorism, minimize the damage and assist in recovery from terrorist attacks, and to facilitate recovery from either man-made or natural disasters. The MIT-LL's role in Homeland Protection includes defining and developing architectures, sensors, and information-sharing technologies that integrate DoD capabilities to the breadth of operations led by civilian authorities. The broad sponsorship for this mission area spans the Department of Defense, the Department of Homeland Security (DHS), and other federal, state, and local entities. Recent efforts include architecture studies for the defense of civilians and facilities against biological attacks, development of the Enhanced Regional Situation Awareness system for the National Capital Region, the assessment of technologies for border and maritime security, and the development of architectures and systems for disaster response.

11.4.10 Air Traffic Control. The Air Traffic Control mission area focuses on research and development to support new technology for air traffic control, develop advanced integrated weather systems, decision-support technologies, and open systems architectures for air surveillance sensors, information security,

and collaborative air traffic management. Since 1971, MIT-LL has supported the Federal Aviation Administration (FAA) in the development of new technology for air traffic control. This work initially focused on aircraft surveillance and weather sensing, collision avoidance, and air/ground data link communications. The program has evolved to include safety applications, decision support, and air traffic management automation tools. The current program is supporting the FAA's Next Generation Air Transportation System. Key activities include the operation of a national-scale integrated weather sensing and decision support prototype, testing and technology transfer of a runway incursion-prevention system, development of a future air traffic control tower automation platform, and the development of a net-centric, systemwide information management system.

11.4.11 Prototype Engineering. Prototype engineering is function of all research areas and supports all mission areas. Prototype engineering places a special emphasis on the integration of design and analysis capabilities to support the rapid prototyping of hardware and software systems.

11.4.12 Contractor Requirement. In the performance of this contract, the contractor agrees to cooperate with MIT-LL by: 1) responding to invitations from authorized U. S. Government personnel to attend meetings; 2) providing access to technical information and research, development planning data such as, but not limited to, design and development analyses, test data and results, equipment and process specifications, test and test equipment specifications and procedures, parts and quality control procedures, records and data, manufacturing and assembly procedures, and schedule and milestone data, all in their original form or reproduced form and including top-level life cycle cost* data, where available; 3) delivering data as specified in the Contract Data Requirements List; 4) discussing technical matters relating to this program; 5) providing access to contractor facilities utilized in the performance of this contract; 6) and allowing observation of technical activities by appropriate technical personnel of MIT-LL. The MIT-LL personnel engaged in MUOS SLE efforts: (i) are authorized access to all such technical information (including proprietary information) pertaining to this contract and may discuss and disclose it to applicable personnel in a program office; (ii) are authorized to discuss and disclose such technical information (including proprietary information) to the commander or director of the relevant organizations and programs; and (iii) MIT-LL shall make the technical information (including proprietary information) available only to its Trustees, officers, employees, contract labor, consultants, and attorneys who have a need to know.

11.4.13 Subcontractor Requirement. The contractor further agrees to include in all subcontracts a requirement requiring compliance by subcontractor and supplier and succeeding levels of subcontractors and suppliers with the response and access and disclosure provisions of this Enabling Requirement, subject to coordination with the contractor, except for subcontracts for commercial items or commercial services. This agreement does not relieve the contractor of its responsibility to manage the subcontracts effectively and efficiently nor is it intended to establish privity of contract between the Government or MIT-LL and such subcontractors or suppliers, except as indicated below.

11.4.14 Master Non-disclosure Agreement. MIT Lincoln Lab shall protect the proprietary information of contractors, subcontractors, and suppliers in accordance with its Master Non-disclosure Agreement, a copy of which is available upon request. This Master Non-disclosure Agreement satisfies the Nondisclosure Agreement requirements set forth in 10 U.S.C. §2320 (f)(2)(B), and provides that such contractors, subcontractors, and suppliers are intended third-party beneficiaries under the Master Non-disclosure Agreement and shall have the full rights to enforce the terms and conditions of the Master Non-disclosure Agreement directly against MIT-LL, as if they had been signatory party hereto. Each such contractor, subcontractor, or supplier hereby waives any requirement for MIT-LL to enter into any

separate company-to-company confidentiality or other non-disclosure agreements. MIT-LL shall make the technical information (including proprietary information) available only to its Trustees, officers, employees, contract labor, consultants, and attorneys who have a need to know, and MIT-LL shall maintain between itself and the foregoing binding agreements of general application as may be necessary to fulfill their obligations under the Master Non-disclosure Agreement referred to herein, and MIT-LL agrees that it will inform contractors, subcontractors, and suppliers if it plans to use consultants, or contract labor personnel and, upon the request of such contractor, subcontractor, or supplier, to have its consultants and contract labor personnel execute non-disclosure agreements directly therewith.

11.4.15 Technical Direction. MIT-LL personnel are not authorized to direct the contractor in any manner. Technical direction under this contract will be provided to the contractor solely by SSC. **“Cost data”* means information associated with the programmatic elements of life cycle (concept, development, production, operations, and retirement) of the system/program. As defined, cost data differs from *“financial”* data, which is defined as information associated with the internal workings of a company or contractor that is not specific to a project or program.”

11.5 Enabling Requirements Between Prime Contractors and Service Contractors

11.5.1 Overview. The United States Space Force (USSF) Space Systems Command (SSC) has entered into contracts with Tecolote Research Inc., Modern Technology Solutions, Inc., BCubed Engineering Corporation, and Linquest Corporation for Advisory and Assistance Services to provide support in areas to include general systems engineering and integration and technical reviews.

11.5.2 General Systems Engineering and Integration (GSE&I). GSE&I deals with overall system definition; integration both within the system and with associated systems; review of analysis definition and requirement allocation, analysis of system segment and subsystem design; design compromises and tradeoffs; definition of interfaces; review of hardware and software, including manufacturing and quality control; observation, review and evaluation of tests and test data; support of launch, flight test, and orbital operations; appraisal of the Contractors' technical performance through meetings with Contractors and subcontractors, exchange and analysis of information on progress and problems; review of plans for future work; developing solutions to problems; technical alternatives for reduced program risk; providing comments and recommendations in writing to the applicable DoD System Program Manager or Project Officer as an independent technical assessment for consideration for modifying the program or redirecting the Contractor's efforts; all to the extent necessary to assure timely and economical accomplishment of program objectives consistent with mission requirements.

11.5.3 Technical Review (TR). Technical Review includes the process of appraising the technical performance of the Contractor through meetings, exchanging information on progress and problems, reviewing reports, evaluating presentations, reviewing hardware and software, witnessing and evaluating tests, analyzing plans for future work, evaluating efforts relative to contract technical objectives, and providing comments and recommendations in writing to the applicable Space Force Program Manager as an independent technical assessment for consideration for modifying the program or redirecting the Contractor's efforts to assure timely and economical accomplishment of program objectives.

11.5.4 Contractor Requirement. In the performance of this contract, the Contractor agrees to cooperate with Tecolote Research Inc., Modern Technology Solutions, Inc., BCubed Engineering Corporation, and Linquest Corporation by 1) responding to invitations from authorized U. S. Government personnel to

attend meetings; 2) by providing access to technical information and research, development planning data such as, but not limited to, design and development analyses, test data and results, equipment and process specifications, test and test equipment specifications and procedures, parts and quality control procedures, records and data, manufacturing and assembly procedures, and schedule and milestone data, all in their original form or reproduced form and including/or excluding top-level life cycle cost* data, where available; 3) by delivering data as specified in the Contract Data Requirements List; 4) by discussing technical matters relating to this program; 5) by providing access to Contractor facilities utilized in the performance of this contract; 6) and by allowing observation of technical activities by appropriate technical personnel. The personnel engaged in GSE&I and TR efforts are authorized access to all such technical information (including proprietary information) pertaining to this contract and are bound by their respective NDAs with the Government to protect the information they receive. In the performance of this contract, the contractor agrees to provide MTSI and Tecolote access to the contract deliverable cost data of the program. Notwithstanding language contained elsewhere in this contract, contractor and its subcontractors shall not be obligated to disclose proprietary financial information to any non-Government entities providing services to the Government during the proposal or contract execution and management phases of this activity.

11.5.5 Subcontractor Requirement. The Contractor further agrees to include in all subcontracts a contract requirement requiring compliance by subcontractor and suppliers with the response and access and disclosure provisions of this Enabling Clause, subject to coordination with the Contractor, except for subcontracts for commercial items or commercial services. This agreement does not relieve the Contractor of its responsibility to manage the subcontracts effectively and efficiently nor is it intended to establish privity of contract between the Government or its technical advisors and such subcontractors or suppliers.

11.5.6 Organizational Conflict of Interest. The Service Contractor contracts contains an organizational conflict of interest clause that requires the Contractors to protect data and proprietary information and prohibits the Contractors from using the data and proprietary information for any purpose other than that for which the data was presented.

11.5.7 Technical Direction. Service Contractor personnel are not authorized to direct a Contractor in any manner. Technical direction under this contract will be given to the Contractor solely by SSC. Whenever it becomes necessary to modify the contract and redirect the effort, a change order signed by the Contracting Officer, or a Supplemental Agreement signed by both the Contracting Officer and the Contractor will be issued.

* Cost data is defined as information associated with the programmatic elements of life cycle (concept, development, production, operations, and retirement) of the system/program. As defined, cost data differs from "financial" data, which is defined as information associated with the internal workings of a company or Contractor that is not specific to a project or program.

FAR Clauses

52.203-7 Ant-Kickback Procedures (Jun 2020) (Applies to all subcontracts in excess of the threshold specified in FAR 3.502-2(i) on the date of the subcontract award.)

52.215-21, ALT III, REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA OR INFORMATION OTHER THAN CERTIFIED COST OR PRICING DATA - MODIFICATIONS (OCT 1997) (Applies to subcontracts when submission via electronic media is required.)

52.215-21, ALT IV, REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA OR INFORMATION OTHER THAN CERTIFIED COST OR PRICING DATA - MODIFICATIONS (OCT 2010) (Applies to subcontracts when an SF 1411 will not be required because an exception may apply, but information other than cost or pricing data is required as described in FAR 15.403-3.)

52.216-16 Incentive Price Revision – Firm Target (Jan 2022) (Applies to incentive type subcontracts.)

52.227-1, ALT I, AUTHORIZATION AND CONSENT (APR 1984) (Applies to subcontracts for research and development work.)

52.232-16 Progress Payments (Nov 2021) (Applies to subcontracts with progress payments.)

52.232-17 INTEREST (MAY 2014) (Applies to subcontracts which contain FAR clauses which expressly refer to an Interest clause, e.g. fixed price incentive subcontracts containing FAR 52.216-16 or FAR 52.216-17.)

52.232-39 Unenforceability of Unauthorized Obligations (Jun 2013) (Applies to subcontracts where software or services will be retransferred to the Government.)

52.243-1 Changes – Fixed-Price, ALT I (Apr 1984) (Applies to subcontracts for services, other than architect-engineer or other professional services, and no supplies are to be furnished.)

DFARS Clauses

252.203-7001 Prohibition on Persons Convicted of Fraud or Other Defense-Contract-Related Felonies (Dec 2008)

252.203-7002 Requirement To Inform Employees of Whistleblower Rights (Sep 2013)

252.209-7008 NOTICE OF PROHIBITION RELATING TO ORGANIZATIONAL CONFLICT OF INTEREST-- MAJOR DEFENSE ACQUISITION PROGRAM (DEC 2010) (Applies to subcontracts where there is a possibility the subcontractor may have an organizational conflict of interest.)

252.209-7009 Organizational Conflict of Interest – Major Defense Acquisition Program (May 2019)

252.215-7008 ONLY ONE OFFER (JUL 2019) (Applies to subcontracts in excess of the simplified acquisition threshold.)

252.215-7016 Notification to Offerors—Post-award Debriefings. (Mar 2022)

252.225-7057 Preaward Disclosure of Employment of Individuals Who Work in the People’s Republic of China (Aug 2022) (Applies to subcontracts that employ one or more individuals who perform work in the People’s Republic of China.)

252.225-7058 Postaward Disclosure of Employment of Individuals Who Work in the People's Republic of China. (Aug 2020) (Applies to all subcontracts that meet the definition of a covered contract.)

252.227-7013 RIGHTS IN TECHNICAL DATA -- NONCOMMERCIAL ITEMS (FEB 2014) (Applies to subcontracts for noncommercial items that require the delivery of technical data.)

252.227-7015 Technical Data – Commercial Items (Feb 2014) (Applies to subcontracts with technical data pertaining to any portion of a commercial item that was developed in any part at Government expense.)

252.227-7017 Identification and Assertion of Use, Release, or Disclosure Restrictionism (Jan 2011)

252.227-7037 Validation of Restrictive Markings on Technical Data (Apr 2022) (Applies to subcontracts requiring the delivery of technical data.)

252.234-7003 NOTICE OF COST AND SOFTWARE DATA REPORTING SYSTEM (NOV 2014) (Applies to subcontracts at any tier in excess of \$50,000,000.)

252.234-7004 Cost and Software Data Reporting System (Nov 2014) (Applies to subcontracts in excess of \$50,000,000.)

252.239-7010 CLOUD COMPUTING RESOURCES (Sep 2022) (Applies to subcontracts that involve or may involve cloud services, including subcontracts for commercial items.)

252.243-7002 Requests for Equitable Adjustment (Dec 2012) (Applies to subcontracts in excess of \$150,000.)

252.244-7000 Subcontracts for Commercial Items and Commercial Components (DOD CONTRACTS) (Jan 2021)

252.249-7002 Notification of Anticipated Contract Termination or Reduction (Jun 2020) (Applies to subcontracts in excess of the threshold at DFARS 225.870-4(c)(2)(i)(A)(1).)