

STATEMENT OF OBJECTIVES
Collaborative Center for the Design and Research Of InterDisciplinary Systems
(CC DROIDS)
26 July 2023

1.0 INTRODUCTION

- 1.1. **Purpose:** The Aerospace Systems Directorate of the Air Force Research Laboratory (AFRL/RQ) shall set up a partnership with an American university by establishing a Collaborative Center for the Design and Research Of InterDisciplinary Systems (CC DROIDS). The purpose of the CC DROIDS is to complement AFRL in pursuit of its goal to lead the research and development of novel design methods and tools for the optimization and assessment of revolutionary aerospace vehicles. CC DROIDS is an organizational concept to bolster common research interests through collaboration among the participants. Developing a Collaborative Center is expected to be mutually beneficial, increasing the agility and responsiveness of AFRL research efforts while providing experience and mentorship to students.
- 1.2. **Competency Areas:** The Multidisciplinary Sciences and Technology Center (MSTC) within AFRL leads the integration of multiple disciplines to discover and exploit new phenomena for system level optimization and the assessment of revolutionary aerospace vehicles from concept development through preliminary design. Our goal is to model systems--and systems of systems--to a level of fidelity necessary to capture the physics which drive system design and to perform design space exploration. Current competency areas within MSTC are:
 - 1.2.1. Design Space Exploration: Multifidelity model-based systems engineering (MBSE); single-vehicle mission to campaign-level effectiveness analysis; system of systems analysis; cost effectiveness analysis; logistics and sustainment footprints; deterministic gradient and non-gradient based optimization methods; propulsion and subsystem integration; fuel and system thermal management; risk-quantified large-scale (10^4 design variables, 10^6 constraints) design space exploration; high-fidelity system level design optimization.
 - 1.2.2. Multifidelity Modeling and Analysis for Design Optimization: Sensitivity analysis; computational fluid dynamics; linear and nonlinear structural mechanics and structural dynamics; linear and nonlinear computational aerothermoelasticity; aeroservoelastic analysis; uncertainty quantification and design under uncertainty; goal-oriented adaptive, high-order finite-element analysis; aerodynamic conceptual design; novel configuration assessment; rapid assessment method development; structural conceptual design; high-fidelity structural topology

optimization, secondary structure weight estimation; design for life; design for manufacture.

1.2.3. Multidisciplinary Technology Development, Assessment, and Validation:

Aerothermoelastic wind tunnel testing; ground vibration testing; remotely piloted vehicle (RPV) scaled flight testing; multidisciplinary technologies assessment; data assimilation in multidisciplinary design analysis and optimization (MDAO).

2.0 OBJECTIVES

2.1 The objectives for CC DROIDS are to develop research activities which align with the Technology Areas of MSTC, to foster close research collaboration between AFRL and university partners, to mentor highly qualified students, and to exploit existing engineering software or develop new software where needed.

2.1.1 ***Technology Areas:*** AFRL's MSTC has a mandate to support a wide range of computational and experimental requirements for future Air Force capabilities. The focus for this Collaborative Center will be on developing multidisciplinary technologies and computational methods required to perform reliable, multi-fidelity, multidisciplinary analysis and design exploration of aerospace vehicles across size, speed, and altitude space from small UAVs to transport platforms, including subsonic to hypersonic configurations. The Collaborative Center will need to perform research in the following areas--which mirror the research thrusts of MSTC outlined above--applied to one or more Air Force relevant capabilities. It is expected that the proposed work is contextualized against the current state of the art, including previous AFRL MSTC research efforts.

a. TA1: Design Space Exploration

- Risk-quantified design space exploration: Develop and exploit robust design methods, reliability-based design, design under uncertainty, multi-level optimization, multi-objective optimization, gradient and non-gradient based optimization methods for quantitative risk assessment in multidisciplinary design of large-scale problems (10^4 design variables, 10^6 constraints)
- Effectiveness-based design: Integrate operations analyses with multi-fidelity vehicle design (vehicle class/type, aerodynamic shape, topological and structural layout, propulsion and subsystem integration and sizing, etc.) to evaluate the impact of vehicle parameters on system operational behavior. A modeling framework is needed to allow consistent assessment of designs with multiple power and propulsion systems.

Brayton-based, Rankine-based, electric, and hybrid systems may be evaluated for power supply, as well a range of ducted and unducted propulsors. Support non-gradient-based, gradient-based, and mixed optimization. Consider parameterization of the mission profile for mission optimization.

- Digital engineering: Integrate MBSE practices and tools into aerospace system design processes to improve collaboration and ensure a consistent representation of the system across all models and teams. Centralize requirements and design artifacts for long-term preservation and traceability.

b. TA2: Multifidelity Modeling and Analysis for Design Optimization

- Efficient multidisciplinary analysis with design sensitivities: low-to-high-fidelity coupled physics analysis with computed analytic, semi-analytic, and numerical design sensitivities. Aerodynamic, structural dynamic, thermal, acoustic, controls, and other potential physical disciplines that couple to produce emergent physical phenomena not present in single discipline analyses (e.g., aeroelasticity). Steady, time-periodic, transient, and chaotic responses, including critical points representative of changes in stability. Methods of transferring data across physical interfaces in a conservative and consistent manner (e.g., load/displacement). Adaptively learned multi-fidelity surrogate models and methods for accelerating analysis while maintaining fidelity (e.g., physics and statistics-based Reduced Order Models (ROMs), leverage of time periodicity, and critical point identification).
- Goal-oriented adaptive analyses: Develop, test, and exploit goal-oriented algorithms for adapting analysis to engineering problems in a quantitative, machine-oriented, objective driven manner that accounts for varied uncertainty sources and updates during design space exploration. Blend local adaptations based on discretization, numerical order, and fidelity, and possibly other algorithmic properties to meet desired objectives, including numerical accuracy and computational cost. Technical challenges include handling large parameter variations, high-order generation and deformation of high-quality meshes, including high-order space-time meshes, adaptivity in the presence of coupled physics, generating fast and accurate sensitivities. Leverage ideas in multi-fidelity surrogate construction, Bayesian inference and updating, and heterogeneous computing resources. Test on meaningful benchmarks to quantify benefits of adaptive approaches.

- Design Under Uncertainty: Address modeling, parametric, and numerical sources of uncertainty. Develop forward and inverse uncertainty propagation methods to trade efficiency and accuracy when quantifying aleatoric and epistemic uncertainties encountered in multidisciplinary design such that follow-on design phases start with conservative estimates of performance. New methods should be scalable (>20 variables) and compatible with multiple fidelity representations of single physics and multi-physics models, and their associated uncertainties. Methods including but not limited to Bayesian updating, integrating multiple information sources, adaptive dimension reduction, global sensitivity analysis, and novel stochastic collocation techniques.
- c. TA3: Multidisciplinary Technology Development, Assessment, and Validation
- Aeroelastic modal topology optimization: Coupling structural and aerodynamic analysis for structural topology optimization of air vehicles where the optimality criteria are mode and mode shape based. This may include experimental validation of the transient response of a representative structure.
 - Experimental data in MDAO: Incorporating experimental data with uncertainty into the design process to account for un-modeled physics, aleatory uncertainty, correction factors, truth data, or hardware in the loop design. This may include in-situ experiments within the design process or post processed data.
 - Quantified technology assessment: Incorporation of computational and experimental techniques into a system engineering design and technology assessment process and computing framework. Employing/utilizing/including probabilistic approaches, quantitatively assess the impact of suites of technologies on a vehicle design's measures of performance and effectiveness. Benefits and penalties should be captured in a coupled manner to account for total system impacts, and probabilistically to account for uncertainty in estimates and coupling.
 - Multidisciplinary technologies: Develop and demonstrate technologies that create improved capabilities by leveraging the synergy between multiple disciplines. Explore the performance space to understand coupled system behavior, and how that behavior can be best exploited. Explore how system performance is improved through application of the

technology to representative systems or sub-systems. Two examples are active aeroelastic wing technology and multifunctional structures.

2.2 *Quality of Personnel:*

- 2.2.1 Successful pursuit of these technology challenges requires a high caliber of research personnel. Collaborative Center team members must be highly accomplished in their research activities and well regarded in their technical areas. Any short-term, entry-level, or student researchers supporting the research must be well-skilled and/or highly trainable, directly supervised, and prepared to contribute effectively with minimal oversight.

2.3 *Collaboration:*

- 2.3.1 A major goal within AFRL is to establish a cooperative relationship with external researchers in order to increase the agility and responsiveness of research efforts. It is desired to pursue a collaborative effort in multidisciplinary sciences and design. The objective of the collaboration is to provide research in aerospace vehicle design through a broad and agile base of expertise. The collaborative research is expected to further new multidisciplinary research areas of unique interest to the Air Force. By conducting this collaborative research, AFRL and the Collaborative Center can accelerate innovative research in a variety of areas. It is envisioned that there will be regularly scheduled interaction between the Collaborative Center researchers and AFRL researchers including, but not limited to: annual reviews, in-person technical interchange meetings at both the collaboration facilities and AFRL, as well as regular video conference meetings. Such connectivity allows the research to be more focused and establishes a synergistic working relationship with AFRL personnel which can significantly raise productivity. This close relationship with AFRL also maximizes transition opportunities for the collaboratively developed technologies. More specific expected elements of the Collaborative Center include:
 - a. The collaborative research program will begin with a kickoff period in which researchers will have detailed meetings with MSTC personnel so that technical issues and proposed solutions can be fully understood by all team members. This period may include visit(s) to WPAFB and tours of Air Force facilities to initiate discussions regarding facility usage by projects within the Collaborative Center.
 - b. Annual reviews will be held alternately at the Collaborative Center research site and at Wright-Patterson AFB.

- c. Numerous less formal meetings throughout the period of performance will also be held. A plan for future, long-term growth of the collaborative multi-disciplinary science research capability is required. Researchers in the Collaborative Center will need to interface not only with Air Force researchers but also with the Air Force's key collaborators, such as, but not limited to, a large network of academics funded by AFOSR, AFRL (Aerospace Systems Directorate and other technical directorates/divisions/branches), DARPA, NASA and other government and industry organizations. The best fit for the Collaborative Center will be research teams that have the ability and willingness to form dynamic partnerships, and which have demonstrated success working in a cross-organizational fashion.
- d. To facilitate collaboration and integration into AFRL methods and processes, it is desired that the Collaborative Center will allocate funding for supporting students to work on site at WPAFB, typically during summer months, to offset the cost of local housing, relocation, etc.
- e. The Collaborative Center is expected to publish or otherwise make publicly available results of work performed under this agreement to the extent the results are deemed publicly releasable by AFRL. It is highly desirable that the Collaborative Center pursue peer-reviewed publication of its research.
- f. ITAR work is not anticipated in this Collaborative Center, but if such work is necessary or deemed advantageous, the university must be able to support ITAR research, in which case a detailed security plan adhering to ITAR restrictions will be required.
- g. Students funded through the Collaborative Center will be encouraged to apply for scholarships not impinging on the technical objectives of the Collaborative Center.
- h. To maximize collaborative opportunities and transition potential, it is encouraged but not required students be US citizens.

2.4 Software:

- 2.4.1 Because of the computational focus of the Collaborative Center, software will be a critical medium of research and an important product of the collaboration. Research and development may utilize software from AFRL and from other readily available sources, as required. Emphasis will be placed on software engineering practices that will maximize efficiency in development and flexibility

in reuse and interoperation. Software development and scientific computing skills such as version control (git), testing, documentation, containerization, etc., are desired, since it is expected that effective software will lead to significant advances in capability that will be shared between the Collaborative Center, AFRL, and other partners. Software development plans shall include integration into AFRL computational codes and frameworks. For MBSE tasks, the use of the Dassault's Catia Magic System of Systems Architect should be considered before new development is undertaken. For military utility analysis, the preferred tool is AFSIM. If tasks require the development of vehicle geometry and surface/volume discretization the use of the Computational Aircraft Prototype Syntheses (CAPS) should be considered before new development is undertaken. If tasks require thermal and structural analysis with sensitivities the use of the Multidisciplinary design Adaptation and Sensitivity Toolkit (MAST) should be first considered. Finally, if tasks require the development or use of RANS or Euler computational fluid dynamics the use of either FUN3D or ChiDG should be considered before new development, or the use of an alternate code is undertaken.

3.0 DELIVERABLES

3.1 Interim Performance Reports

3.2 Financial Reports--Reimbursement

3.3 Publishing Project Results

3.4 Final Performance Report

3.5 Reporting of Subawards and Executive Compensation

3.6 Disclosure of Information

3.7 Reporting of Matters Related to Recipient Integrity and Performance

3.8 Software

4.0 OPERATIONS SECURITY (OPSEC)

- 4.1 OPSEC must be an integral part of our daily activities. As we maintain security on our future technologies that are vital to national interest, we must recognize and prepare for the threat poised against our technology. Department of Defense policies mandate a high degree of security throughout the acquisition process. However, heightened security awareness and threat-based countermeasures are particularly essential during

the research and development phase when our technology is most vulnerable to espionage, sabotage, or exploitation. It is the obligation of each employee or person involved on this agreement to be constantly aware of and strictly adhere to security requirements designed to protect sensitive unclassified and other information and resources produced by acquisition, research and development, and technological security efforts outlined in this SOO. The Recipient shall ensure employees receive training and follow appropriate OPSEC measures during the performance of the agreement.

**Statement of Work (SOW)
Supplemental Requirements for Assistance Instruments (AFRL/PZL)
Oct 2022**

The following paragraphs are also considered be a part of the SOW requirements and the Recipient is responsible for compliance to the same extent as the rest of the SOW.

1. Science and Technology (S&T) Protection: The requirements below are in accordance with Air Force Research Laboratory Instruction (AFRLI) 61-113, *"Science and Technology (S&T) Protection for the Air Force Research Laboratory"*.

- a. Initial/Annual/New SF 424, Research and Related Senior/Key Person Profile (Expanded) Form, Requirement: The Recipient shall provide an SF 424 with the following information:
 - i. Initial SF 424: An initial report of all Senior/Key Personnel at the time of award. This form is required with proposal submission.
 - ii. Annual SF 424: An annual report of all Senior/Key Personnel providing support. The first submission is due 30 days after 12 months after receipt of award. Subsequent submissions are due every 12 months after first annual submission, and throughout the technical effort.
 - iii. New/Revised SF424: A report for any new Senior/Key Personnel who join the contract, agreement, grant, or OT. Any updated SF 424s for new Senior/Key Personnel supporting the award require coordination from the Government prior to the Recipient employee receiving access to S&T information. These reports are required to provide updates and supplements to the SF 424 as appropriate during the period of performance. Identify changes from previous versions. Permanent change pages shall conform to the requirements, quality, style, and format of the basic documentation.

Submission: Annual and Revised SF 424s shall be submitted electronically in Microsoft Office Suite compatible format, PDG, or RTF as coordinated with the Air Force Program Manager. For email delivery, include the award number in the subject line. The recipient shall submit one copy of the SF 424 to:

- (1) AFRL Program Manager
- (2) AFRL/RQOS Security

Note: Submit electronically. Electronic submittals shall be either encrypted or password protected.

Mark all data delivered with the following Distribution Statement: Distribution authorized to A: Approved for public release, distribution is unlimited.

COOPERATIVE AGREEMENT ARTICLES

**Collaborative Center for the Design and Research Of InterDisciplinary Systems
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26 July 2023**

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1.00 ADMINISTRATIVE REQUIREMENTS AND ORDER OF PRECEDENCE (MAR 2015)

- (a) This award is governed by the guidance in the Code of Federal Regulations (CFR), Title 2, Subtitle A, Chapter II, Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards," as modified and supplemented by the Department of Defense's (DoD) interim implementation found at 2 CFR part 1104, "Implementation of Government wide Guidance for Grants and Cooperative Agreements." (79 FR 76047, December 19, 2014, as amended at 85 FR 49506, August 13, 2020).
- (b) In the event of a conflict between the terms of this agreement and other governing documents, the conflict shall be resolved by giving precedence in descending order as follows:
- (1) Federal statutes
 - (2) Federal regulations*
 - (3) 2 CFR part 200* as modified and supplemented by DoD's interim implementation found in 2 CFR Part 1104
 - (4) Award-specific terms and conditions
 - (5) Attachments to this award if any
- (c) In case of disagreement with any requirements of this award, the recipient shall contact the grants officer in order to resolve the issue. The recipient shall not assess any costs to the award or accept any payments until the issue is resolved.

1.01 ADMINISTRATIVE RESPONSIBILITIES (MAR 2015)

- (a) Government Representatives are:
- (1) Grants Officer: TBD
 - (2) Grants Negotiator: TBD
 - (3) Government Program Manager: TBD

- (4) Finance: TBD
- (5) Grants Administration Office: TBD
- (6) Paying Office: TBD

1.02 DELEGATION OF ADMINISTRATION (MAR 2015)

- (a) The administrative duties listed below have been delegated to the grants administration office:
 - (1) During performance:
 - (i) Approve provisionally all Requests for Advance or Reimbursement (SF 270).
 - (ii) Perform property administration.
 - (iii) Perform plant clearance.
 - (iv) Approve requests for Registration of Scientific and Technical Information Services (DD Form 1540).
 - (v) Perform cash management by reviewing quarterly Federal Financial Report (SF 425) and, after conferring with the AFRL grants officer, make appropriate adjustments to predetermined scheduled payments by modifying the agreement.
 - (vi) Obtain Interim Inventions Reports (DD Form 882)
 - (vii) Obtain Interim Technical Reports
- (b) Upon expiration of agreements:
 - (1) Obtain final payment request, if any.
 - (2) Obtain the final Federal Financial Report (SF 425).
 - (3) Obtain final property report and dispose of Government Property on those assistance awards containing residual Government Property.
 - (4) Perform a review of final incurred costs and assist the awarding grants officer in resolving exceptions, if any, resulting from questioned costs.
 - (5) Perform cost sharing adjustments, if applicable.
 - (6) Assure that all refunds due the Government are received.
 - (7) Notify the grants officer when the final SF270 and/or SF425 indicates an unexpended balance.
 - (8) Obtain Final Inventions Report (DD Form 882). Negative reports required.
 - (i) Obtain Patent Clearance from (Insert POC or email address).

2.00 TERMINATION (MAR 2015)

- (i) The grants officer may terminate this agreement by written notice to the recipient upon a finding that the recipient has failed to comply with the material provisions of this agreement.
- (ii) Additionally, this agreement may be terminated by either party upon written notice to the other party. Such written notice shall be preceded by consultation between the parties. If the recipient initiates the termination, written notification shall be provided to the grants officer at least 30 days prior to the requested effective date. The notification shall state the reasons for the termination, the requested effective date, and, if a partial termination, the portion to be terminated. If the grants officer determines, in the case of a partial termination, that the reduced or modified portion of the award will not accomplish the purpose for which the award was made, the grants officer may terminate the award in its entirety.
- (iii) The Government and the recipient will negotiate in good faith an equitable reimbursement for work performed toward accomplishment of program goals. The Government will allow full credit to the recipient for the Government share of the obligations properly incurred by the recipient prior to termination, and those non-cancelable obligations that remain after the termination. The cost principles and procedures described in the article entitled "Cost Principles" shall govern all costs claimed, agreed to, or determined under this article.
- (iv) If this agreement is incrementally funded, it may be terminated in the absence of additional government funding as set forth in the article entitled Incremental Funding.
- (v) In the event of a termination, the Government shall have a paid-up Government purpose license in any subject invention, copyright work and data made or developed under this agreement.
- (vi) If this agreement is terminated, the Government has the rights identified in and the recipient shall comply with the article entitled Closeout, Adjustments, Continuing Responsibilities and Collection.
- (vii) Notwithstanding the above, for security or safety reasons or in the case of a serious breach that could lead to irreparable damage, the grants officer may order immediate suspension of work, in whole or in part.

2.01 TRAFFICKING IN PERSONS (MAR 2015)

- (a) This award is subject to the requirements of section 106 (g) of the Trafficking Victims Protection Act of 2000 (22 U.S.C. 7104, as implemented by 2 CFR 175). If the recipient or any subawardee (i) engages in severe forms of trafficking in persons or has procured a commercial sex act during that the period of time of the grant or cooperative agreement is in effect or (ii) uses forced labor in the performance of the grant or cooperative agreement, the Government shall be authorized to terminate the grant or cooperative agreement without penalty.

2.02 ENFORCEMENT (MAR 2015)

- (a) In addition to the remedies identified in the article entitled Termination, the Government may use any of the remedies identified in 2 CFR 200 § 339 when determined appropriate.

2.03 MODIFICATIONS (MAR 2015)

- (a) Modifications to this agreement may be proposed by either party. Recipient recommendations for any modifications to this agreement shall be submitted in writing to the Government program manager before the desired effective date with a copy to the grants officer. The recipient shall detail the technical, chronological, and financial impact of the proposed modification to the program. Changes are effective only after the agreement has been modified. Only the grants officer has the authority to act on behalf of the Government to modify this agreement. If the Government agrees to the proposed modification without change, the grants officer may issue a modification unilaterally approving the request.
- (b) The grants officer or administrative grants officer may unilaterally issue minor or administrative agreement modifications (e.g., changes in the paying office or appropriation data, changes to Government personnel identified in the agreement, etc.).

3.00 TITLE TO PROPERTY (MAR 2015)

- (a) Unless otherwise stated in the Award, title to personal property acquired with agreement funds shall vest in the recipient upon acquisition, except that supplies shall be managed in accordance with 2 CFR 200 § 314. Title to real property shall vest in the recipient subject to conditions contained in 2 CFR 200 §311. The recipient shall dispose of real property in accordance with grants officer instructions issued pursuant to 2 CFR 200 § 311.

3.01 PROPERTY SYSTEM (MAR 2015)

- (a) The recipient's property system shall meet the standards as set forth in 2 CFR 200 § 310 - 316.

3.02 SCOPE AND MANAGEMENT OF THE PROGRAM (MAR 2015)

- (a) The Government and the recipient are bound to each other by a duty of good faith and best effort to achieve the goals of this agreement. This agreement is not intended to be, nor shall it be construed as, by implication or otherwise, a partnership, a corporation, or other business organization.
- (b) The recipient shall perform a coordinated research and development program carried out in accordance with the Statement of Work entitled, "**Collaborative Center for Design and Research of InterDisciplinary Systems (CC DROIDS)**", dated "**DATE**". The recipient shall submit all documentation required by Part 7, Technical and Financial Reporting.
- (c) The recipient shall accomplish the overall management, including technical, programmatic, reporting, financial and administrative matters, of the coordinated research program. The Government program manager(s) may interact with the recipient to promote effective collaboration between the recipient and the Government.

3.03 BASE SUPPORT (MAR 2015)

- (a) Base support shall be provided by the Government to the recipient in accordance with this article.
 - (1) Base support includes Government-controlled working space, material, equipment, services (including automatic data processing), or other support (excluding use of the Defense Switched Network (DSN)) which the Government determines can be made available at, or through, any Air Force installation where this agreement shall be performed.

- (2) Following are installations where base support will be provided: **AFRL/RQVC, Facility 20146, Building 146, Wright-Patterson AFB, OH 45433.**

3.04 RECIPIENT ACCESS TO AIR FORCE INSTALLATIONS (OCT 2019)

- (a) The recipient shall obtain base identification and vehicle passes, if required, for all personnel who make frequent visits to or perform work on the Air Force installation(s) cited in the assistance instrument. Recipient personnel are required to wear or prominently display installation identification badges or recipient-furnished, recipient identification badges while visiting or performing work on the installation.
- (b) The recipient shall submit a written request on company letterhead to the grants officer listing the following: assistance instrument number, location of work site, start and stop dates, and names of employees and subcontractor employees needing access to the base. The letter will also specify the individual(s) authorized to sign for a request for base identification credentials or vehicle passes. The grants officer will endorse the request and forward it to the issuing base pass and registration office or Security Forces for processing. When reporting to the registration office, the authorized individual(s) should provide a valid driver's license, current vehicle registration, valid vehicle insurance certificate, to obtain a vehicle pass.
- (c) During performance the recipient shall be responsible for obtaining required identification for newly assigned personnel and for prompt return of credentials and vehicle passes for any employee who no longer requires access to the work site.
- (d) When work under this assistance instrument requires unescorted entry to controlled or restricted areas, the recipient shall comply with AFI 31-101, Integrated Defense, and DODMAN5200.02 AFMAN 16-1405, Air Force Personnel Security Program.
- (e) Upon completion or termination of the assistance instrument or expiration of the identification passes, the prime recipient shall ensure that all base identification passes issued to employees and subcontractor employees are returned to the issuing office.
- (f) Failure to comply with these requirements may result in withholding of final payment.

3.05 COMMON ACCESS CARDS (CAC) FOR RECIPIENT PERSONNEL (OCT 2019)

- (a) For installation(s)/location(s) cited in the assistance instrument, recipients shall ensure Common Access Cards (CACs) are obtained by all recipient or subcontract personnel who meet one or both of the following criteria:
 - (1) Require logical access to Department of Defense computer networks and systems in either:
 - (i) the unclassified environment; or
 - (ii) the classified environment where authorized by governing security directives.
 - (2) Perform work, which requires the use of a CAC for installation entry control or physical access to facilities and buildings.
- (b) Recipients and their personnel shall use the following procedures to obtain CACs:

- (1) Recipients shall provide a listing of personnel who require a CAC to the grants officer. The government will provide the recipient instruction on how to complete the Contractor Verification System (CVS) application and then notify the recipient when approved.
- (2) Recipient personnel shall obtain a CAC from the nearest Real Time Automated Personnel Identification Documentation System (RAPIDS) Issuing Facility (typically the local Military Personnel Flight (MPF)).
- (c) While visiting or performing work on installation(s)/location(s), recipient personnel shall wear or prominently display the CAC as required by the governing local policy.
- (d) During the performance period of the assistance instrument, the recipient shall:
 - (1) Within 7 working days of any changes to the listing of the assistance instrument personnel authorized a CAC, provide an updated listing to the grants officer who will provide the updated listing to the authorizing government official;
 - (2) Return CACs in accordance with local policy/directives within 7 working days of a change in status for personnel who no longer require logical or physical access;
 - (3) Return CACs in accordance with local policy/directives within 7 working days following a CACs expiration date; and
 - (4) Report lost or stolen CACs in accordance with local policy/directives.
- (e) Within 7 working days following completion/termination of the assistance instrument, the recipient shall return all CACs issued to their personnel to the issuing office or the location specified by local policy/directives.
- (f) Failure to comply with these requirements may result in withholding of final payment.

3.06 ACCESS TO USAF BASES, AFRL FACILITIES AND/OR U.S. GOVERNMENT INFORMATION TECHNOLOGY NETWORKS (NOV 2016)

- (a) Recipient employees requiring access to USAF bases, AFRL facilities, and/or access to U.S. Government Information Technology networks in connection with the work on this agreement must be U.S. citizens. Possession of a permanent resident card ("Green Card") does not equate to U.S. citizenship. This requirement does not apply to foreign nationals approved by the U.S. Department of Defense or U.S. State Department under international personnel exchange agreements with foreign governments. Any waivers to this requirement must be granted in writing by the Grants Officer prior to providing access. The above requirements are in addition to any other agreement requirements related to obtaining a Common Access Card (CAC).

4.00 INCREMENTAL FUNDING (MAR 2015)

- (a) In no event is the Government obligated to reimburse the recipient for expenditures in excess of the total funds allotted by the Government to this agreement. The Government anticipates that from time to time additional amounts will be allotted to this agreement by unilateral modification, until the total Government share is fully funded.
- (b) If additional funds are not made available, this agreement may be terminated pursuant to the article entitled Termination. The recipient is not obligated to continue performance or otherwise incur costs in excess of the amount then allotted to the agreement by the Government or, if this is a cost sharing

agreement, the amount then allotted by the Government to the agreement plus the recipient's corresponding share, until the grants officer notifies the recipient in writing that the amount allotted by the Government has been increased and specifies an increased amount, which shall then constitute the total amount allotted by the Government to this agreement. When and to the extent that the amount allotted by the Government to the agreement is increased, any costs the recipient incurs before the increase that are in excess of the amount previously allotted by the Government or if this is a cost-sharing agreement, the amount previously allotted by the Government to the agreement plus the recipient's corresponding share, shall be allowable to the same extent as if incurred afterward, unless the grants officer issues a termination or other notice and directs that the increase is solely to cover termination or other specified expenses.

4.01 PAYMENT-REIMBURSEMENT-WAWF (ONR) (MAR 2015)

- (a) The recipient shall request payment by reimbursement by electronically submitting Standard Forms (SF) 270, Requests for Advance or Reimbursement, through Wide Area Work Flow (WAWF), <https://wawf.eb.mil>.

- (b) The following codes will be required to route requests and emails correctly through WAWF

AWARD NUMBER: TBD
TYPE OF DOCUMENT: TBD
CAGE CODE: TBD
ISSUED BY DODAAC: TBD
ADMIN DODAAC: TBD
GOVERNMENT PROGRAM MANAGER: TBD
SERVICE ACCEPTOR OFFICE DODAAC: TBD
PAY OFFICE DODAAC: TBD
APPROVAL OFFICE DODAAC: TBD
SEND E-MAIL NOTIFICATIONS for completed SF 270: TBD

- (c) WAWF has been designated as the Department of Defense (DoD) standard for electronic invoicing and payment. To facilitate this effort for universities and non-profit organizations with awards administered by the Office of Naval Research (ONR) Regional Offices, DoD has established the ONR Electronic Payment System (PayWeb), <https://onronline.onr.navy.mil/payweb/>, as an initial entry point to WAWF. If the recipient participates in the PayWeb system, electronic requests for payment shall be submitted to the Administrative Grants Officer (AGO) at the Administrative Office in Block TBD of the award, using the standard PayWeb processes.
- (d) Participation in the PayWeb system requires the recipient to obtain an External Certificate Authority (ECA) certificate from an approved certificate authority for access. Operational Research Consultants (ORC), <http://www.eca.orc.com>, and VeriSign, <http://www.verisign.com/gov/ieca>, are approved ECA authorities. Questions or requests for technical assistance in implementing certificates should be addressed to the Navy PKI Help Desk at 1-800-304-4636. The recipient shall contact the AGO at the Administrative Office in Block TBD of the award for instructions to register and use WAWF/ PayWeb.
- (e) Electronic submission of payment requests requires the recipient to register in WAWF and have the appropriate CAGE code activated. The recipient's System for Award Management (SAM) Electronic Business Point of Contact (EBPOC) is responsible for activating the CAGE code in WAWF by calling 1-866-618-5988. Once the recipient's CAGE Code is activated, the CCR EBPOC will self-register in WAWF and follow the instructions for a group administrator. ONR Regional Offices will assist in this process. The ONR Regional Office is listed as the Administrative Office in Block TBD of the award.

- (f) If the recipient does not participate in the ONR PayWeb system, payment requests may be submitted electronically via WAWF. The recipient shall contact the AGO at the Administrative Office in Block TBD of the award for instructions regarding registration in and use of WAWF.
- (g) Recipients may also request reimbursement by submitting original SFs 270, Requests for Advance or Reimbursement, to the Administrative Grants Officer (AGO) with a copy to the AFRL Grants/Agreements Officer and AFRL Program Manager.
- (h) Final payment will be made only after delivery and acceptance of the final report prepared in accordance with the article entitled TBD.

4.05 PROGRAM INCOME-RESEARCH (MAR 2015)

- (a) Any program income earned shall be used in accordance with 2 CFR 200 § 307 as follows:
 - (1) All program income earned during the project period shall be added to funds committed to the project by the Government and recipient organization and be used to further eligible program objectives.
 - (2) The recipient may deduct costs associated with generating program income from gross income to determine program income, provided these costs are not charged to the agreement.
 - (3) The recipient has no obligation to the Government for program income earned after the end of the project period.
 - (4) The recipient will have no obligation to the Government for program income earned from license fees and royalties for copyrighted material, patents, patent applications, trademarks and inventions produced under the agreement.

4.06 COST PRINCIPLES (MAR 2015)

- (a) The cost principles applicable to this agreement are contained in 2 CFR 200, Subpart E, Cost Principles. 2 CFR 200 describes the cost principles for determining allowability of costs applicable to lower tier, cost type contracts or awards under this agreement shall be determined by type of entity receiving the lower tier contract or award.

4.07 STANDARDS FOR FINANCIAL MANAGEMENT (MAR 2015)

- (a) The recipient's financial management system shall comply with the standards identified in 2 CFR 200 § 302.

4.08 AUDIT REQUIREMENTS (MAR 2015)

- (a) The recipient shall comply with the audit requirements of 2 CFR 200, Subpart F Audit Requirements. Subrecipient(s) shall comply with the audit requirements appropriate for the type of entity receiving the award as required.

4.09 RETENTION AND ACCESS TO RECORDS (MAR 2015)

- (a) Recipient's financial records, supporting documents, statistical records, and all other records pertinent to an award shall be retained and access to them permitted in accordance with 2 CFR 200 § 334-338.

4.10 REVISION OF BUDGETS AND PROGRAM PLANS (MAR 2015)

- (a) The budget plan is the financial expression of the program as approved during the award process. The budget includes the sum of the Government cost share and the recipient cost share, if any. Recipients shall report deviations from budget and program plans and shall request prior approvals for budget and program plan revisions for all situations listed in 2 CFR 200 § 308.

5.00 CLAIMS, DISPUTES, AND APPEALS (MAR 2015)

- (a) General. Parties shall communicate with one another in good faith and in a timely and cooperative manner when raising issues under this article. Department of Defense (DoD) policy is to resolve issues through discussions and mutual agreement at the grants officer's level prior to submission of a claim. Where unassisted negotiations fail to resolve issues in controversy, the parties agree to consider the use of Alternative Dispute Resolution (ADR) procedures to the maximum extent practicable.
- (b) Alternative Dispute Resolution. ADR should be used whenever practicable as a relatively inexpensive and expeditious procedure to resolve issues in controversy. ADR is any mutually agreed to voluntary means of settling issues in controversy without resorting to formal administrative appeals or litigation. ADR techniques shall be mutually agreed to and may be used at any appropriate time during the process.
- (c) Claims Resolution Process. When a claim cannot be resolved by the parties, the parties agree to use the procedures identified in DoDGARs 22.815 as the administrative process to resolve claims, disputes and appeals. For purposes of this article the Grant Appeal Authority will be the applicable AFRL Technology Director.
- (d) Non-exclusivity of Remedies. Nothing in this article is intended to limit a recipient's right to any remedy under the law.

6.00 INVENTIONS (MAR 2015)

- (a) The clause entitled Patent Rights (Small Business Firms and Nonprofit Organizations, (37 CFR 401.14(a)) is hereby incorporated by reference and is modified as follows: replace the word "contractor" with "recipient"; replace the words "agency," "Federal Agency" and "funding Federal Agency" with "Government"; replace the word "contract" with "agreement"; delete paragraphs (g)(2), (g)(3) and the words "to be performed by a small business firm or domestic nonprofit organization" from paragraph (g)(1). Paragraph (l), Communications, point of contact on matters relating to this clause will be the servicing Staff Judge Advocate's office.
- (b) Interim or final Invention Reports 1) listing subject invention(s) and stating that all subject inventions have been disclosed, or 2) stating that there are no such inventions, shall be sent to both the Administrative Grants Officer at the address located in the agreement and to the Grants Officer/Patent Administrator at det1.afrl.pk.patents@us.af.mil, with a courtesy copy (cc:) to the government Program Manager/Project Engineer. Please include in the subject line of the e-mail the contract number followed by the words "Invention Reporting." Also include in the body of the e-mail the names of the Government Project Engineer/Program Manager and his/her office symbol. The recipient shall file Invention (Patent) Reports on the DD Form 882, Report of Inventions and Subcontracts, as of the close of each performance year and at the end of the term for this agreement. Annual reports are due 90 days after the end of each year of performance and final reports are due

90 days after the expiration of the final performance period. Negative reports are also required annually.

- (c) The DD Form 882 may also be used for the notification of any subaward(s) for experimental, developmental or research work which contain a "Patent Rights" clause, with a cc: to the government Program Manager/Project Engineer.
- (d) All other notifications (e.g., disclosure of each subject invention to the grants officer within 2 months after the inventor discloses it) shall also be sent to the e-mail address above, with a cc: to the government Program Manager/Project Engineer.
- (e) This provision also constitutes the request for the following information for any subject invention for which the recipient has retained ownership: 1) the filing date, 2) serial number and title, 3) a copy of the patent application and 4) patent number and issue date. Submittal shall be to the grants officer / patent administrator e-mail address listed above, with a cc: to the government Program Manager/Project Engineer.

6.01 DATA RIGHTS (MAR 2015)

- (a) All rights and title to data, as defined in 48 CFR 27.401, generated under this agreement shall vest in the recipient.
- (b) Assertion of copyright.
 - (1) The recipient may assert copyright in any work that is eligible for copyright protection if the recipient acquires ownership of it under this award, either by developing it or otherwise.
 - (2) With respect to any work in which you assert copyright, DoD reserves a royalty-free, nonexclusive and irrevocable license to:
 - (i) Reproduce, publish, or otherwise use the work for Federal Government purposes; and
 - (ii) Authorize others to reproduce, publish, or otherwise use the work for Federal Government purposes.
- (c) Data produced under the award.
 - (1) The Federal Government has the right to:
 - (i) Obtain, reproduce, publish, or otherwise use the data produced under this award; and
 - (ii) Authorize others to receive, reproduce, publish, or otherwise use the data produced under this award for Federal Government purposes.
- (d) The recipient is responsible for affixing appropriate markings indicating rights on all data delivered under the agreement. The Government will have unlimited rights in all data delivered without markings.
- (e) The recipient shall include this article, suitably modified to identify the parties, in all lower tier contracts and awards, regardless of tier, for experimental, developmental, or research work.
- (f) When the intangible property is no longer needed for the originally authorized purpose, the recipient must contact the awarding office to arrange for disposition in accordance with the procedures specified in 2 CFR 200-313(e).

7.00 INTERIM PERFORMANCE REPORTS (MAR 2015)

- (a) Recipients shall submit Interim Performance Reports in accordance with this article and 2 CFR 200 § 329. The recipient may submit reports in electronic form.
- (b) Content: Reports shall detail technical progress to date and report on all problems, technical issues, or major developments that arose during the reporting period. The reports shall discuss each of the topics listed below:
 - (1) A comparison of actual accomplishments with the goals and objectives established for the period, the findings of the investigator, or both.
 - (2) Reasons why established goals were not met, if appropriate.
 - (3) Other pertinent information including analysis and an explanation of cost overruns.
- (c) Submission: The recipient shall submit Interim Performance Reports quarterly within 30 days after completion of the reporting period throughout the term of the agreement. The first period begins on the effective date of the agreement. The recipient shall submit one copy of the Interim Performance Report to:
 - (1) AFRL program manager;
 - (2) Grants Officer;
 - (3) administrative grants officer, and
 - (4) any other sponsoring agency program manager if applicable.
- (d) Mark all data delivered with the following statement: DISTRIBUTION STATEMENT A. Distribution is approved for public release, distribution is unlimited.

7.01 FINANCIAL REPORTS- REIMBURSEMENT (MAR 2015)

- (a) The recipient shall submit the Federal Financial Report (SF 425) on a cash basis within 30 days following the end of each quarterly reporting period (March 31, June 30, September 30, December 31), and within 90 days following the completion of the agreement. Grant and cooperative agreement recipients that are domestic institutions of higher education must complete the optional fields 11.a through 11.f, "Indirect Expense" on the final Federal Financial Report that it submits after the end of the project period under the award. One copy of each report shall be submitted to:
 - (1) the Administrative Grants Officer;
 - (2) AFRL Grants Officer;
 - (3) AFRL Program Manager; and
 - (4) any other Program Manager identified in the Award.

7.02 PUBLISHING PROJECT RESULTS (MAR 2015)

- (a) Publications. The recipient is expected to publish or otherwise make publicly available the results of the work conducted under this award. One copy of all publications resulting from the project shall be forwarded to the AFRL program manager as it becomes available.
- (b) An acknowledgment of awarding agency's support shall appear in the publication of any material, whether copyrighted or not. The acknowledgement shall read: "This material is based on research sponsored by TBD under agreement number TBD. The U.S. Government is authorized to reproduce and distribute reprints for Governmental purposes notwithstanding any copyright notation thereon."
- (c) The recipient is responsible for assuring that every publication of material based on or developed under this project contains the following disclaimer: "The views and conclusions contained herein are those of the authors and should not be interpreted as necessarily representing the official policies or endorsements, either expressed or implied, of TBD or the U.S. Government."

7.03 FINAL PERFORMANCE REPORT (MAR 2015)

- (a) Recipients shall submit the Final Performance Report in accordance with this article and 2 CFR 200 § 329. All publications shall contain the notice included in the article entitled Publishing Project Results.
 - (1) Content: The Final Performance Report will provide a comprehensive, cumulative, and substantive summary of the progress and significant accomplishments achieved during the period covered by the agreement. Each of the topics listed in the article entitled Interim Performance Reports shall be addressed as appropriate. Publications may be bound and attached as appendices.
 - (2) Format: Submit the Final Performance Report in the following format:
 - (i) Prepare the Cover/Title Page by completing the Standard Form (SF) 298, Report Documentation Page. In Item 13 include a 100 to 200 word abstract summarizing technical progress during the reporting period. Style is to be third person singular using past tense. Jargon, special symbols or notations, subscripts, mathematical symbols or foreign alphabet letters are not permitted. All pages should be of good quality for copying purposes.
 - (ii) The report shall be prepared in accordance with American National Standard Institute document ANSI/NISO Z39.18-1995, Scientific and Technical Reports - Elements, Organization, and Design which may be obtained from:

NISO Press Fulfillment Center
PO Box 451
Annapolis Junction MD 20701-0451
<http://www.niso.org>
 - (iii) Submission. The recipient shall submit the Final Performance Report (with letter of transmittal), in the original (camera ready) and TBD copies, to TBD within 90 days after completion of the agreement with one electronic copy in MS Word compatible format. Submit one copy of the report to any other program manager identified as other sponsoring agency personnel. Also, provide one copy each of the transmittal letter to:
 - (A) TBD and
 - (B) Administrative grants officer.
- (b) Mark all data delivered with the following statement: TBD

7.04 REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION (MAR 2015)

(a) Reporting of first-tier subawards.

- (1) Applicability. Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates \$25,000 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in paragraph e. of this award term).
- (2) Where and when to report.
 - (i) You must report each obligating action described in paragraph a.1. of this award term to <http://www.fsrc.gov>.
 - (ii) For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)
- (3) What to report. You must report the information about each obligating action that the submission instructions posted at <http://www.fsrc.gov> specify.

(b) Reporting Total Compensation of Recipient Executives.

- (1) Applicability and what to report. You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if-
 - (i) the total Federal funding authorized to date under this award is \$25,000 or more;
 - (ii) in the preceding fiscal year, you received-
 - (A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - (B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - (iii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/excomp.htm>.)
- (2) Where and when to report. You must report executive total compensation described in paragraph b.1. of this award term:
 - (i) As part of your registration profile at <http://www.sam.gov>.
 - (ii) By the end of the month following the month in which this award is made, and annually thereafter.

(c) Reporting of Total Compensation of Subrecipient Executives.

(1) Applicability and what to report. Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if-

(i) in the subrecipient's preceding fiscal year, the subrecipient received

(A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

(2) Where and when to report. You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

(i) To the recipient.

(ii) By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

(d) Exemptions: If, in the previous tax year, you had gross income, from all sources, under \$300,000, you are exempt from the requirements to report:

(1) Subawards, and

(2) The total compensation of the five most highly compensated executives of any subrecipient.

(e) Definitions. For purposes of this award term:

(1) Entity means all of the following, as defined in 2 CFR part 25:

(i) A Governmental organization, which is a State, local government, or Indian tribe;

(ii) A foreign public entity;

(iii) A domestic or foreign nonprofit organization;

(iv) A domestic or foreign for-profit organization;

(v) A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

- (2) Executive means officers, managing partners, or any other employees in management positions.
- (3) Subaward:
 - (i) This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
 - (ii) A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.
- (4) Subrecipient means an entity that:
 - (A) Receives a subaward from you (the recipient) under this award; and
 - (ii) Is accountable to you for the use of the Federal funds provided by the subaward.
- (5) Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):
 - (A) Salary and bonus.
 - (B) Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
 - (iii) Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
 - (iv) Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
 - (v) Above-market earnings on deferred compensation which is not tax-qualified.
 - (vi) Other compensation, if the aggregate value of all such other compensation (e.g., severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

7.05 DISCLOSURE OF INFORMATION (MAR 2015)

- (a) The Recipient shall not release to anyone outside the Recipient's organization any unclassified information, regardless of medium (e.g., film, tape, document, media announcements, etc.), pertaining to any part of this agreement or any program related to this agreement unless-
 - (1) The Agreements Officer has given prior written approval; or
 - (2) The information is otherwise in the public domain before the date of release.

- (b) Requests for approval shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Recipient shall submit its request to the Agreements Officer at least 65 days before the proposed date for release.
- (c) The Recipient agrees to include a similar requirement in each sub-agreement under this agreement. Subrecipients shall submit requests for authorization to release through the prime Recipient to the Agreements Officer.

7.06 REPORTING OF MATTERS RELATED TO RECIPIENT INTEGRITY AND PERFORMANCE (DEC 2015)

(a) General Reporting Requirement

- (1) If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

(b) Proceedings About Which You Must Report:

- (1) Submit the information required about each proceeding that:

- (i) Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
- (ii) Reached its final disposition during the most recent five year period; and
- (iii) Is one of the following:
 - (A) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
 - (B) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
 - (C) An administrative proceeding, as defined in paragraph 5. of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or
 - (D) Any other criminal, civil, or administrative proceeding if:
 - 1. It could have led to an outcome described in paragraph 2.c.(1), (2), or (3) of this award term and condition;
 - 2. It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and

3. The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

(c) Reporting Procedures

- (1) Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

(d) Reporting Frequency

- (1) During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

(e) Definitions

- (1) For purposes of this award term and condition:
 - (i) Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.
 - (ii) Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.
 - (iii) Total value of currently active grants, cooperative agreements, and procurement contracts includes—
 - (A) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
 - (B) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

7.07 SOFTWARE (JUL 2023)

- (a) All software developed as part of this effort will be subject to the same data rights requirements as outlined in Section 6.01.

8.00 PROCUREMENT SYSTEM (MAR 2015)

- (a) The recipient's procurement system shall comply with the standards contained in 2 CFR 200 § 317-326.

8.01 CLOSEOUT, ADJUSTMENT, CONTINUING RESPONSIBILITIES AND COLLECTION--REIMBURSEMENT (MAR 2015)

- (i) Closeout, adjustment and collection of amounts due shall be accomplished in accordance with 2 CFR 200 § 343, 344, and Subpart F. Final payment cannot be made, nor can the agreement be closed out until the recipient delivers to the Government all disclosures of subject inventions required by this agreement, an acceptable final report pursuant to the article entitled Final Performance Report, and all confirmatory instruments. The grants officer may make a settlement for any downward adjustments to the Federal share of costs after closeout reports are received.

8.02 USING TECHNICAL INFORMATION RESOURCES (MAR 2015)

- (a) To the extent practical, the recipient shall use the technical information resources of the Defense Technical Information Center (DTIC) and other Government or private facilities to investigate recent and on-going research and avoid needless duplication of scientific and engineering effort.

8.03 SYSTEM FOR AWARD MANAGEMENT AND UNIQUE ENTITY IDENTIFIER REQUIREMENTS (MAR 2022)

- (a) Requirement for System for Award Management (SAM): Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must:
 - (1) Maintain the currency of your information in the system the Federal Government specifies as the repository for information about its business partners (currently SAM). This includes information on your immediate and highest level owner and subsidiaries, as well as on all of your predecessors that have been awarded a Federal contract or Federal financial assistance within the last three years, if applicable.
 - (2) You must maintain the information in that system until you submit the final financial report required under this award or receive the final payment, whichever is later.
 - (3) You must review and update the information at least annually after your initial registration in the system and more frequently if required by changes in your information or another Federal award term.
- (b) Requirement for Unique Entity Identifier (UEI): If you are authorized to make subawards under this award, you:
 - (1) Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its UEI to you.
 - (2) May not make a subaward to an entity unless the entity has provided its UEI to you.
- (c) Definitions: For purposes of this award term:
 - (1) System for Award Management (SAM) means the Federal repository into which a recipient must provide information required for the conduct of business as a recipient. Additional information

about registration procedures may be found at the SAM Internet site (currently at <http://www.sam.gov>).

- (2) Unique Entity Identifier means the identifier required for System for Award Management registration to uniquely identify entities with which the Federal Government does business.
- (3) Entity, as it is used in this award term, means all of the following, as defined in paragraph C.3 of appendix A to OMB guidance in 2 CFR part 25. **Entity** includes:
 - (i) Non-Federal entities as defined at 2 CFR 200.1, which means a State, local government, Indian tribe, Institution of Higher Education (IHE), or nonprofit organization that carries out a Federal award as a recipient or subrecipient.
 - (ii) A foreign organization;
 - (iii) A foreign public entity;
 - (iv) A domestic for-profit organization; and
 - (v) A Federal agency.
- (4) *Subaward* means an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract.
- (5) *Subrecipient* means an entity, usually but not limited to non-Federal entities, that receives a subaward from a pass-through entity to carry out part of a Federal award; but does not include an individual that is a beneficiary of such award. A subrecipient may also be a recipient of other Federal awards directly from a Federal awarding agency.

9.00 NONDISCRIMINATION NATIONAL POLICY REQUIREMENTS (SEPTEMBER 2017)

- (a) By signing this award or accepting funds under this award, you assure that you will comply with applicable provisions of the national policies prohibiting discrimination:
 - (1) On the basis of race, color, or national origin, in Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.), as implemented by Department of Defense (DoD) regulations at 32 CFR part 195.
 - (2) On the basis of gender, blindness, or visual impairment, in Title IX of the Education Amendments of 1972 (20 U.S.C. 1681 et seq.), as implemented by DoD regulations at 32 CFR part 196.
 - (3) On the basis of age, in the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.), as implemented by Department of Health and Human Services regulations at 45 CFR part 90.
 - (4) On the basis of disability, in the Rehabilitation Act of 1973 (29 U.S.C. 794), as implemented by Department of Justice regulations at 28 CFR part 41 and DoD regulations at 32 CFR part 56.
 - (5) On the basis of disability in the Architectural Barriers Act of 1968 (42 U.S.C. 4151 et seq.) related to physically handicapped persons' ready access to, and use of, buildings and facilities for which Federal funds are used in design, construction, or alteration.

9.01 ENVIRONMENTAL NATIONAL POLICY REQUIREMENTS (JANUARY 2021)

- (a) You must comply with all applicable Federal environmental laws and regulations. The laws and regulations identified in this section are not intended to be a complete list.
- (b) Comply with applicable provisions of the Clean Air Act (42 U.S.C. 7401, et seq.) and Clean Water Act (33 U.S.C. 1251, et seq.).
- (c) Comply with applicable provisions of the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846), as implemented by the Department of Housing and Urban Development at 24 CFR part 35. The requirements concern lead-based paint in buildings owned by the Federal Government or housing receiving Federal assistance.
- (d) Immediately identify to us, as the Federal awarding agency, any potential impact that you find this award may have on:
 - (1) The quality of the “human environment”, as defined in 40 CFR 1508.14, including wetlands; and provide any help we may need to comply with the National Environmental Policy Act (NEPA, at 42 U.S.C. 4321 et seq.), the regulations at 40 CFR 1500-1508, and Executive Order 12114, if applicable; and assist us to prepare Environmental Impact Statements or other environmental documentation. In such cases, you may take no action that will have an environmental impact (e.g., physical disturbance of a site such as breaking of ground) or limit the choice of reasonable alternatives to the proposed action until we provide written notification of Federal compliance with NEPA or Executive Order 12114.
 - (2) Flood-prone areas, and provide any help we may need to comply with the National Flood Insurance Act of 1968, as amended by the Flood Disaster Protection Act of 1973 (42 U.S.C. 4001 et seq.), which require flood insurance, when available, for federally assisted construction or acquisition in flood-prone areas.
 - (3) A land or water use or natural resource of a coastal zone that is part of a federally approved State coastal zone management plan and provide any help we may need to comply with the Coastal Zone Management Act of 1972 (16 U.S.C. 1451, et seq.) including preparation of a Federal agency Coastal Consistency Determination.
 - (4) Coastal barriers along the Atlantic and Gulf coasts and Great Lakes’ shores, and provide help we may need to comply with the Coastal Barrier Resources Act (16 U.S.C. 3501 et seq.), concerning preservation of barrier resources.
 - (5) Any existing or proposed component of the National Wild and Scenic Rivers system, and provide any help we may need to comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.).
 - (6) Underground sources of drinking water in areas that have an aquifer that is the sole or principal drinking water source and in wellhead protection areas, and provide any help we may need to comply with the Safe Drinking Water Act (42 U.S.C. 300f et seq.).
- (e) You must comply fully with the Endangered Species Act of 1973, as amended (ESA, at 16 U.S.C. 1531 et seq.), and implementing regulations of the Departments of the Interior (50 CFR parts 10-24) and Commerce (50 CFR parts 217-227). You also must provide any help we may need in complying with the consultation requirements of ESA section 7 (16 U.S.C. 1536) applicable to Federal agencies or any regulatory authorization we may need resulting from performance under this award. This is not in lieu of responsibilities you have to comply with provisions of the Act that apply directly to you as a U.S. entity, independent of receiving this award.

- (f) You must fully comply with the Marine Mammal Protection Act of 1972, as amended (MMPA, at 16 U.S.C. 1361 et seq.) and provide any assistance we may need in obtaining any required MMPA permit resulting from performance under this award.

9.04 OTHER NATIONAL POLICY REQUIREMENTS (SEPTEMBER 2021)

- (a) Debarment and suspension. You must comply with requirements regarding debarment and suspension in Subpart C of 2 CFR part 180, as adopted by DoD at 2 CFR part 1125. This includes requirements concerning your principals under this award, as well as requirements concerning your procurement transactions and subawards.
- (b) Drug-free workplace. You must comply with drug-free workplace requirements in Subpart B of 2 CFR part 182, which is the DoD implementation of 41 U.S.C. chapter 81, "Drug-Free Workplace."
- (c) Lobbying.
 - (1) You must comply with the restrictions on lobbying in 31 U.S.C. 1352, as implemented by DoD at 32 CFR part 28, and submit all disclosures required by that statute and regulation.
 - (2) You must comply with the prohibition in 18 U.S.C. 1913 on the use of Federal funds, absent express Congressional authorization, to pay directly or indirectly for any service, advertisement or other written matter, telephone communication, or other device intended to influence at any time a Member of Congress or official of any government concerning any legislation, law, policy, appropriation, or ratification.
 - (3) If you are a nonprofit organization described in section 501(c)(4) of title 26, United States Code (the Internal Revenue Code of 1968), you may not engage in lobbying activities as defined in the Lobbying Disclosure Act of 1995 (2 U.S.C., chapter 26). If we determine that you have engaged in lobbying activities, we will cease all payments to you under this and other awards and terminate the awards unilaterally for material failure to comply with the award terms and conditions.
- (d) Officials not to benefit. You must comply with the requirement that no member of Congress shall be admitted to any share or part of this award, or to any benefit arising from it, in accordance with 41 U.S.C. 6306.
- (e) Hatch Act. If applicable, you must comply with the provisions of the Hatch Act (5 U.S.C. 1501-1508) concerning political activities of certain State and local government employees, as implemented by the Office of Personnel Management at 5 CFR part 151, which limits political activity of employees or officers of State or local governments whose employment is connected to an activity financed in whole or part with Federal funds.
- (f) Native American graves protection and repatriation. If you control or possess Native American remains and associated funerary objects, you must comply with the requirements of 43 CFR part 10, the Department of the Interior implementation of the Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C., chapter 32).
- (g) Fly America Act. You must comply with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118), commonly referred to as the "Fly America Act," and implementing regulations at 41 CFR 301-10.131 through 301-10.143. The law and regulations require that U.S. Government financed international air travel of passengers and transportation of personal effects or property must use a U.S. Flag air carrier or be performed under a cost-sharing arrangement with a U.S. carrier, if such service is available.

- (h) Use of United States-flag vessels. You must comply with the following requirements of the Department of Transportation at 46 CFR 381.7, in regulations implementing the Cargo Preference Act of 1954:
- (1) Pursuant to Public Law 83-664 (46 U.S.C. 55305), at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds under this award, and which may be transported by ocean vessel, must be transported on privately owned United States flag commercial vessels, if available.
 - (2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 8.a. of this section must be furnished to both our award administrator (through you in the case of your contractor's bill-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (i) Research misconduct. You must comply with requirements concerning research misconduct in Enclosure 4 to DoD Instruction 3210.7, "Research Integrity and Misconduct." The Instruction implements the Government wide research misconduct policy that the Office of Science and Technology Policy published in the Federal Register (65 FR 76260, December 6, 2000, available through the U.S. Government Printing Office web site:
<http://www.gpo.gov/fdsys/browse/collection.action?collectionCode=FR>).
- (j) Requirements for an Institution of Higher Education Concerning Military Recruiters and Reserve Officers Training Corps (ROTC).
- (1) As a condition for receiving funds available to the DoD under this award, you agree that you are not an institution of higher education (as defined in 32 CFR part 216) that has a policy or practice that either prohibits, or in effect prevents:
 - (i) The Secretary of a Military Department from maintaining, establishing, or operating a unit of the Senior Reserve Officers Training Corps (ROTC)—in accordance with 10 U.S.C. 654 and other applicable Federal laws—at that institution (or any sub element of that institution);
 - (ii) Any student at that institution (or any sub element of that institution) from enrolling in a unit of the Senior ROTC at another institution of higher education.
 - (iii) The Secretary of a Military Department or Secretary of Homeland Security from gaining access to campuses, or access to students (who are 17 years of age or older) on campuses, for purposes of military recruiting in a manner that is at least equal in quality and scope to the access to campuses and to students that is provided to any other employer; or
 - (iv) Access by military recruiters for purposes of military recruiting to the names of students (who are 17 years of age or older and enrolled at that institution or any sub element of that institution); their addresses, telephone listings, dates and places of birth, levels of education, academic majors, and degrees received; and the most recent educational institutions in which they were enrolled.
 - (2) If you are determined, using the procedures in 32 CFR part 216, to be such an institution of higher education during the period of performance of this award, we:
 - (i) Will cease all payments to you of DoD funds under this award and all other DoD grants and cooperative agreements; and

- (ii) May suspend or terminate those awards unilaterally for material failure to comply with the award terms and conditions.
- (k) Historic preservation. You must identify to us any:
- (1) Property listed or eligible for listing on the National Register of Historic Places that will be affected by this award, and provide any help we may need, with respect to this award, to comply with section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. 306108), as implemented by the Advisory Council on Historic Preservation regulations at 36 CFR part 800 and Executive Order 11593, "Identification and Protection of Historic Properties," [3 CFR, 1971- 1975 Comp., p. 559]. Impacts to historical properties are included in the definition of "human environment" that require impact assessment under NEPA (See Article 19.01).
 - (2) Potential under this award for irreparable loss or destruction of significant scientific, prehistorical, historical, or archeological data, and provide any help we may need, with respect to this award, to comply with the Archaeological and Historic Preservation Act of 1974 (54 U.S.C. chapter 3125).
- (l) Relocation and real property acquisition. You must comply with applicable provisions of 49 CFR part 24, which implements the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601, et seq.) and provides for fair and equitable treatment of persons displaced by federally assisted programs or persons whose property is acquired as a result of such programs.
- (m) Confidentiality of patient records. You must keep confidential any records that you maintain of the identity, diagnosis, prognosis, or treatment of any patient in connection with any program or activity relating to substance abuse education, prevention, training, treatment, or rehabilitation that is assisted directly or indirectly under this award, in accordance with 42 U.S.C. 290dd-2.
- (n) Pro-Children Act. You must comply with applicable restrictions in the Pro-Children Act of 1994 (Title 20, Chapter 68, subchapter X, Part B of the U.S. Code) on smoking in any indoor facility:
- (1) Constructed, operated, or maintained under this award and used for routine or regular provision of kindergarten, elementary, or secondary education or library services to children under the age of 18.
 - (2) Owned, leased, or contracted for and used under this award for the routine provision of federally funded health care, day care, or early childhood development (Head Start) services to children under the age of 18.
- (o) Constitution Day. You must comply with Public Law 108-447, Div. J, Title I, section 111 (36 U.S.C. 106 note), which requires each educational institution receiving Federal funds in a Federal fiscal year to hold an educational program on the United States Constitution on September 17th during that year for the students served by the educational institution.
- (p) Trafficking in persons. You must comply with requirements concerning trafficking in persons specified in the award term at 2 CFR 175.15(b), as applicable.
- (q) Whistleblower protections. You must comply with 10 U.S.C. 2409, including the:
- (1) Prohibition on reprisals against employees disclosing certain types of information to specified persons or bodies; and
 - (2) Requirement to notify your employees in writing, in the predominant native language of the workforce, of their rights and protections under that statute.

- (r) Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019 (Public Law 115-232) prohibits the head of an executive agency from obligating or expending loan or grant funds to procure or obtain, extend, or renew a contract to procure or obtain, or enter into a contract (or extend or renew a contract) to procure or obtain the equipment, services, or systems prohibited systems as identified in section 889 of the NDAA for FY 2019.
- (1) In accordance with 2 CFR 200.216 and 200.471, all awards that are issued on or after August 13, 2020, recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:
- (i) Procure or obtain;
 - (ii) Extend or renew a contract to procure or obtain; or
 - (iii) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
 - (A) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
 - (B) Telecommunications or video surveillance services provided by such entities or using such equipment.
 - (C) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.
- (2) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.
- (3) See Public Law 115-232, section 889 for additional information.

COVERED FOREIGN COUNTRY means the People's Republic of China.

TELECOMMUNICATIONS COST means the cost of using communication and telephony technologies such as mobile phones, land lines, and internet.

- (s) Disclosure Requirements for Recipients of Department of Defense Research and Development Funds.

- (1) Except as provided in subsection (b) and (c), an individual or entity (including a State or local government) that uses funds received from the Department of Defense to carry out research or

development activities shall include, in any public document pertaining to such activities, a clear statement indicating the dollar amount of the funds received from the Department for such activities.

- (2) Exception.--The disclosure requirement under subsection (a) shall not apply to a public document consisting of fewer than 280 characters.
- (3) Waiver.--The Secretary of Defense may waive the disclosure requirement under subsection (a) on a case-by-case basis.
- (4) Public Document Defined.--In this section, the term 'public document' means any document or other written statement made available for public reference or use, regardless of whether such document or statement is made available in hard copy or electronic format.

9.05 ADDITIONAL REQUIREMENTS – NATIONAL POLICY REQUIREMENTS.

(a) Prohibition on Using Funds under Grants and Cooperative Agreements with Entities that Require Certain Internal Confidentiality Agreements.

- (1) You may not require your employees, contractors, or subrecipients seeking to report fraud, waste, or abuse to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting them from lawfully reporting that waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.
- (2) You must notify your employees, contractors, and subrecipients that the prohibitions and restrictions of any internal confidentiality agreements inconsistent with paragraph a. of this award provision are no longer in effect.
- (3) The prohibition in paragraph 1.a. of this section does not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.
- (4) If the Federal Government determines that you are not in compliance with this award provision, it:
 - (i) Will prohibit your use of funds under this award, in accordance with section 743 of Division E of the Consolidated and Further Continuing Resolution Appropriations Act, 2015, (Public Law 113-235) or any successor provision of law; and
 - (ii) May pursue other remedies available for your material failure to comply with award terms and conditions.

(b) Prohibition on a ByteDance Covered Application.

- (1) *The grants/agreements officer shall insert the following article, Prohibition on a ByteDance Covered Application, in all solicitations and awards, unless an exception is granted in accordance with OMB Memorandum M-23-13.*
- (2) Prohibition on a ByteDance Covered Application (Jun 2023)
 - (i) *Definitions.* As used in this article—

(A) *Covered application* means the social networking service TikTok or any successor application or service developed or provided by ByteDance Limited, or an entity owned by ByteDance Limited.

(B) *Information technology*, as defined in 40 U.S.C. 11101(6)—

1. Means any equipment or interconnected system or subsystem of equipment, used in the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency, if the equipment is used by the executive agency directly or is used by an awardee under an award with the executive agency that requires the use—
 - i. Of that equipment; or
 - ii. Of that equipment to a significant extent in the performance of a service or the furnishing of a product;
2. Includes computers, ancillary equipment (including imaging peripherals, input, output, and storage devices necessary for security and surveillance), peripheral equipment designed to be controlled by the central processing unit of a computer, software, firmware and similar procedures, services (including support services), and related resources; but
3. Does not include any equipment acquired by a Federal awardee incidental to a Federal award.

(ii) *Prohibition*. Section 102 of Division R of the Consolidated Appropriations Act, 2023 (Pub. L. 117-328), the No TikTok on Government Devices Act, and its implementing guidance under Office of Management and Budget (OMB) Memorandum M-23-13, dated February 27, 2023, “No TikTok on Government Devices” Implementation Guidance, collectively prohibit the presence or use of a covered application on executive agency information technology, including certain equipment used by Federal awardee(s). The Awardee is prohibited from having or using a covered application on any information technology owned or managed by the Government, or on any information technology used or provided by the Awardee under this award, including equipment provided by the Awardee’s employees; however, this prohibition does not apply if the Grants Office/Agreements Officer provides written notification to the Awardee that an exception has been granted in accordance with OMB Memorandum M-23-13.

(iii) *Subcontracts/Subrecipients*. The Awardee shall insert the substance of this article, including this paragraph (c), in all subawards, including subawards for the acquisition of commercial products or commercial services.

(End of article)

RESEARCH & RELATED Senior/Key Person Profile (Expanded)

PROFILE - Project Director/Principal Investigator			
Prefix:	<input type="text"/>	* First Name:	<input type="text"/>
		Middle Name:	<input type="text"/>
* Last Name:	<input type="text"/>	Suffix:	<input type="text"/>
Position/Title:	<input type="text"/>		
Department:	<input type="text"/>		
Organization Name:	<input type="text"/>		
Division:	<input type="text"/>		
* Street1:	<input type="text"/>		
Street2:	<input type="text"/>		
* City:	<input type="text"/>	County/ Parish:	<input type="text"/>
* State:	<input type="text"/>	Province:	<input type="text"/>
* Country:	<input type="text" value="USA: UNITED STATES"/>	* Zip / Postal Code:	<input type="text"/>
* Phone Number:	<input type="text"/>	Fax Number:	<input type="text"/>
* E-Mail:	<input type="text"/>		
Credential, e.g., agency login:	<input type="text"/>		
* Project Role:	<input type="text" value="PD/PI"/>	Other Project Role Category:	<input type="text"/>
Degree Type:	<input type="text"/>		
Degree Year:	<input type="text"/>		
*Attach Biographical Sketch	<input type="text"/>	Add Attachment	Delete Attachment View Attachment
Attach Current & Pending Support	<input type="text"/>	Add Attachment	Delete Attachment View Attachment

PROFILE - Senior/Key Person 1			
Prefix:	<input type="text"/>	* First Name:	<input type="text"/>
		Middle Name:	<input type="text"/>
* Last Name:	<input type="text"/>	Suffix:	<input type="text"/>
Position/Title:	<input type="text"/>		
Department:	<input type="text"/>		
Organization Name:	<input type="text"/>		
Division:	<input type="text"/>		
* Street1:	<input type="text"/>		
Street2:	<input type="text"/>		
* City:	<input type="text"/>	County/ Parish:	<input type="text"/>
* State:	<input type="text"/>	Province:	<input type="text"/>
* Country:	<input type="text" value="USA: UNITED STATES"/>	* Zip / Postal Code:	<input type="text"/>
* Phone Number:	<input type="text"/>	Fax Number:	<input type="text"/>
* E-Mail:	<input type="text"/>		
Credential, e.g., agency login:	<input type="text"/>		
* Project Role:	<input type="text"/>	Other Project Role Category:	<input type="text"/>
Degree Type:	<input type="text"/>		
Degree Year:	<input type="text"/>		
Attach Biographical Sketch	<input type="text"/>	Add Attachment	Delete Attachment View Attachment
Attach Current & Pending Support	<input type="text"/>	Add Attachment	Delete Attachment View Attachment

Delete Entry

Next Person

To ensure proper performance of this form; after adding 20 additional Senior/ Key Persons; please save your application, close the Adobe Reader, and reopen it.

SECURITY PROGRAM QUESTIONNAIRE

Objective: This questionnaire is used to review the security program and practices of the institutions receiving research funding.

Intended Audience/User: Completed by collaborators; reviewed by S&T Protection Lead.

Date Submitted: _____

Applicant Name: _____

CAGE Code/SCL and level (if applicable): _____

Completed by Name: _____

Position/Title: _____

1. What are your physical security plans?
2. What information security processes are in place?
3. Where will information for this effort be stored? (examples: computers, cloud, file cabinets, etc.)
4. What procedures are in place for transmission/transportation of information for this effort?
5. What procedures are in place for disposal and destruction of information for this effort?
6. What procedures are in place for reproduction of information for this effort?
7. What safeguards are in place for personnel who can access information for this effort?
8. What is the plan for safeguarding GFE/GFI?
9. What procedures are in place for cybersecurity or network protection?
10. What operations security processes are in place to prevent adversaries' access to information for this effort or actions that would compromise your projects?
11. What processes are in place to deter, detect, and mitigate actions of insider threat?
12. What procedures are in place to handle if information for this effort is compromised?
13. Are you willing to provide AFRL S&T Protection training to all personnel with access annually?

Additional comments: