

FUNDING OPPORTUNITY ANNOUNCEMENT
BAA-RVKV-2015-0003
ANNOUNCEMENT OVERVIEW

FEDERAL AGENCY NAME: Air Force Research Laboratory (AFRL) Directed Energy (RD) and Space Vehicles (RV) Directorates

FUNDING OPPORTUNITY ANNOUNCEMENT TITLE: AFRL RD/RV University Cooperative Agreement

FUNDING OPPORTUNITY ANNOUNCEMENT TYPE: Initial Announcement

FUNDING OPPORTUNITY ANNOUNCEMENT NUMBER: BAA-RVKV-2015-0003

CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NUMBER(S): 12.800 Air Force Defense Research Sciences Program

PROPOSAL DUE DATE AND TIME: This is a 5 year open BAA from the date of publication with an anticipated period of performance ranging from one to five years. Proposals may be submitted at any time during that period. All proposals for Cooperative Agreements (CA) must be submitted electronically through the Grants.gov government-wide electronic portal at <http://www.Grants.gov>. Prior to the submission of any proposal, Offerors are required to contact Technical Point of Contact (TPOC) for this BAA in addition to, the applicable TPOC listed in each specific topic area identified in Section I B. & C, as this procedure is intended to minimize unnecessary efforts in proposal preparation and review. In addition to the on-line submission, two paper copies must be submitted to the applicable TPOC listed in each specific topic area located in Section I B. & C. Applicants must notify the Agreements Specialist immediately upon submitting a proposal electronically.

BRIEF PROGRAM SUMMARY: This is a 5 year, open BAA. The AFRL Directed Energy Directorate (RD) and Space Vehicles Directorate (RV) are interested in receiving proposals under this announcement in order to establish university Cooperative Agreements (CA) to provide funds to students/professors in a timely manner for the purpose of engaging U.S./U.S. territories' colleges and universities in directed energy and space vehicles-related basic, applied, and advanced research projects that are of interest to the Department of Defense (DoD). The scope of the research will include the entire spectrum of RD and RV technology that is applicable to the Air Force, including all peripherally-related RD and RV research.

NOTICE TO OFFEROR(S): Funds are not presently available for this effort. No award will be made under this announcement until funds are available. The Government reserves the right to cancel the announcement, either before or after the closing date. In the event the Government cancels the announcement, the Government has no obligation to reimburse an offeror for any costs.

ESTIMATED PROGRAM COST: Multiple cooperative agreement awards of various values are anticipated with a period of performance ranging from one to five years. Anticipated funding for the program (not per contract or award) is \$24.5M over the BAA lifespan with funding allocations anticipated as follows: FY 16 \$4.1M; FY 17 \$5.1M; FY 18 \$5.1M; FY 19 \$5.1M; FY 20 \$5.1M. This funding profile is an estimate only and not a contractual obligation for funding. All funding is subject to change due to Government discretion and availability. Potential offerors should be aware that, due to unanticipated budget fluctuations, funding in any or all areas may change with little or no notice.

GENERAL INFORMATION: Only U.S./U.S. territory educational institutions are eligible to submit proposals in response to this notice. Proposals submitted in response to this BAA that are selected for award are considered to be in accordance with 32 CFR §22.315 merit-based, competitive procedures to an institution of higher education for the performance of research and development. There will be no other announcement issued for this requirement. Offerors should be alert for any BAA amendments

that may permit extensions to the proposal submission date or make other changes to the announcement.

TYPE OF CONTRACTS/INSTRUMENTS: The Air Force reserves the right to award the instrument best suited to the nature of the research proposed. It is anticipated that awards under this BAA will generally be cost assistance awards, which require the successful offerors to have an accounting system considered adequate for tracking costs applicable to the award.

SYSTEM FOR AWARD MANAGEMENT (SAM): Unless exempted by 2 CFR §25.110 all offerors must (1) Be registered in the System for Award Management (SAM) prior to award; (2) Maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or proposal under consideration by an agency; and (3) Provide its Dun and Bradstreet Data Universal Numbering System (DUNS) number in each application or proposal it submits to the agency. On-line registration instructions can be accessed from the SAM home page at <http://www.sam.gov>.

ANTICIPATED NUMBER OF AWARDS: The Air Force anticipates multiple awards. However, the Air Force reserves the right to make a single award, more than one award, partial award(s) or no awards pursuant to this BAA.

TECHNICAL POINT OF CONTACT: The technical point of contacts for this BAA is

Primary: Eunsook Hwang, PhD; eunsook.hwang.1@us.af.mil; phone (505) 846-8721

Alternate: Casey DeRaad; casey.deraad@us.af.mil; phone: (505) 846-9352

CONTRACTING POINT OF CONTACT: The contracting point of contact for this BAA is:

Agreements Specialist: Anne C. Green; anne.green.2@us.af.mil; phone (505)846-5575

Grants Officer: Rita A. Varley; rita.varley@us.af.mil; phone (505) 846-4398

FUNDING OPPORTUNITY ANNOUNCEMENT
BAA-RVKV-2015-0003
FULL TEXT ANNOUNCEMENT

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There will be no other announcement issued for this requirement. Offerors should be alert for any BAA amendments that may permit extensions to the proposal submission date or make other changes to the announcement.

THIS ANNOUNCEMENT CONSTITUTES THE ONLY SOLICITATION. Offerors MUST monitor <http://www.Grants.gov> in the event this announcement is amended. Offerors must monitor these systems to ensure they receive the maximum proposal preparation time for subsequent amendments as these are the official notification websites to request proposals.

I. FUNDING OPPORTUNITY DESCRIPTION

AFRL RD/RV is soliciting technical and cost proposals on the following research efforts:

A. Statement of Objective/Needs: The objective of this effort is to establish a combined AFRL RD/RV University Cooperative Agreement vehicle to efficiently award research funds to universities. These efforts will investigate new concepts as well as the ancillary supporting technologies for directed energy and space vehicles and to enhance theoretical analyses, exploratory studies, or experiments conducted by educational institutions; important for technological advance and innovative activities in which educational institutions have limited resources.

B. DIRECTED ENERGY TECHNOLOGY AREA DESCRIPTIONS:

1. Lasers: This includes solid state, fiber, semi-conductor, short pulse and advanced chemical, gas, and hybrid laser technology for scalable, high energy laser devices for insertion into airborne tactical and strategic applications and ground-based laser system concepts. To accomplish this, we are soliciting creative ideas especially in the area of new solid state laser materials as well as new manufacturing techniques to create new lasers which are of high energy, high average power and good beam quality while being at new and interesting wavelengths that propagate well in the atmosphere. This also might include new high power diode pumping systems. Of course, being university research, many of the innovative ideas can be demonstrated at lower to intermediate powers as long as the technology is scalable to high power.

Primary POC: Dr. Roy Hamil, Phone: (505) 846-0874

Alternate POC: Dr. Timothy Madden, Phone: (505) 846-9076

2. Aero-effects and Airborne Beam Control: This includes advanced optical and imaging technologies such as optical components, optical coatings, advanced beam control, atmospheric compensation, and pointing and tracking. This includes advanced adaptive optics hardware and algorithms for airborne applications. This would include innovative instrumentation techniques for aero-optic metrology for in flight and for in wind tunnel experiments to characterize speckle and scintillation effects on imaged based airborne tracking and transonic/supersonic flow control methods.

Primary POC: Dr. Jim Lasche, Phone: (505) 846-2745

Alternate POC: Lt Joel Lau, Phone: (505) 846-1728

3. High Power Microwaves: This includes generation and transmission of high power electromagnetics/microwaves (HPEM), identification of the susceptibility and vulnerability of electronic systems to HPEM, investigation of materials of specific relevance to HPEM generation and propagation, HPEM plasma physics theory and simulation algorithm development, and applications of HPM to meet national defense needs. Technologies include HPEM sources, pulsed power, and high energy beam and plasma physics.

Primary POC: Peter Mardahl, Phone: (505) 846-8571
Alternate POC: Matthew Domonkos, Phone: (505) 853-4507

4. Weapons Modeling & Simulation: The WM&S CTC routinely assesses DE/KE weapons Planning Capability Concepts' (PCCs') military utility during all Research and Development (R&D) phases and researches & develops state-of-the-art M&S analysis tools; enabling focused investment decisions, accurate reporting to customers and on-time transition of economical, high-performance warfighter solutions. These analyses include constructive simulations (fully-numerical simulations), virtual (operator-in-the-loop), distributed (wargaming), operations research, and cost. On one hand this means that the mission evaluation environment must credibly represent (qualitatively and quantitatively) the mission scenarios, systems, threats, interoperability, etc. in spite of significant or rapid changes. On the other hand, systems are evaluated specifically because they change the status quo. These include DE systems which are expected to cause significant changes in the mission outcomes. These requirements drive state-of-the-art performance requirements from both the Modeling & Simulation systems and the systems being studied and give rise to multiple technical challenges.

Proposals are encouraged which enable the application of academically rigorous analysis, computational, optimization, etc. approaches to the mission and campaign-level analyses.

Specific areas of interest include:

- **Battle Management:** In modern warfighting systems, operators can choose between a variety of effects. Such decisions frequently have to be made faster than is practical for operators and must not enable success in an individual engagement, but rather enable success in multiple engagements that enable complete mission success. Optimization approaches which enable effective resource use and mission success are needed.
- **Multi-Scale Methods:** Classically, analysts have to choose between the use of fast engineering models or high-fidelity physics models. Multi-scale methods which obtain the best balance of fidelity and speed are needed.
- **Optimization:** Optimization is frequently used to determine the "best case" for a particular system or design. However, optimization convergence and refinement can cause unacceptably long run times. Future computational algorithms which accelerate optimization performance at mission level to real-time or faster are needed.
- **Weather:** Efficient weather models are needed to inform mission-level simulations and enable real-time or faster simulation execution. Such models would predict/diagnose volume extinction and beam degradation effects for single laser beams and for broad bands of sensing as a function of quantified atmospheric conditions, leading to temporally and spatially-correlated weather predictions indicative of weather patterns at specific points on the globe.
- **Uncertainty Quantification:** In contemporary simulations, the statistical variation of an input parameter is frequently known and can be specified as the parameter's "uncertainty." This leads to a need to quantify simulation output uncertainty as function of input parameter probability density functions (PDFs). Classical Monte Carlo methods are too slow, even with advanced optimization algorithms.

Computational algorithms which utilize parameters' specified uncertainty directly in the mathematics and do not require slow, iterative optimization convergence are needed.

- **Far-from-Equilibrium Systems, Data Mining:** The whole point to new conceptual systems is that they change the status quo. Systematic simulation approaches which data mine for game-changing system configurations are needed.

Primary POC: William Cooper, Phone (505) 853-4430

Alternate POC: Linda Lamberson, Phone (505) 846-9414

5. Space Domain Awareness: Novel techniques for monitoring space objects and predicting intent are needed to address the challenges associated with increasing use of and reliance on space assets. AFRL/RD is looking for new techniques that improve on current ground based monitoring and characterization of space objects. Particular technology needs are space object detection of dim objects including those at long range and closely spaced objects with significantly different visual magnitudes; methodologies for tracking and imaging with a particular emphasis on daylight techniques; space signature fingerprinting using spectroscopic or other non-imaging techniques; and non-traditional modalities including passive RF sensors; sparse apertures; and active techniques. Non-traditional applications of conventional technologies are also of interest. Research and development in mitigating atmospheric turbulence are desired particularly atmospheric computational methods to study combined atmospheric turbulence and refractive effects in space at low elevation angles.

Primary POC: Stacie Williams, Phone: (808) 891-7702

Alternate POC: Anthony Sligar, Phone (808) 891-7704

6. Optics and Beam Control: This includes advanced optical and imaging technologies such as optical components, optical coatings, advanced beam control, adaptive optics, atmospheric compensation, and pointing and tracking. Also included are wide field optics for Space Situational Awareness.

Primary POC: Robert Johnson, Phone: (505) 846-6699

Alternate POC: Mala Mateen, Phone: (505) 846-0464

7. Laser Guide Stars: This Includes lasers and systems designed to serve as laser guide stars for adaptive optics systems. Laser guidestar technologies of interest are those which would enable either an increase in return photon flux or Strehl ratio from existing laser guidestar systems or would represent a novel approach to delivering a less expensive system, a more reliable system, or a system with greater return photon flux or Strehl ratio compared to current generation guidestars. Suggested topics for laser guidestars would include: idealizing the launching of multiple guidestar beams, idealizing the overlap of multiple laser guidestar beams in the atmosphere, integrated Vertical External Cavity Surface Emitting Laser (VECSEL) guidestars systems, increasing the total return photon flux of current Sum Frequency Generation (SFG) and Raman Fiber Amplifier (RFA) guidestars systems, utilization of Rayleigh guidestar systems to achieve AO corrections appreciable to sodium laser guidestars, and development of guidestar systems with multiple excitation or scattering wavelengths to achieve AO correction across the visible spectrum.

Primary POC: Capt Shawn Hackett Phone: (505) 846-2005

Alternate POC: Capt Joseph Cardoza (505) 846 4018

8. Sensors: This includes both fast, quiet focal planes for visible and near IR beam control as well as wide field of view sensors for Space Situational Awareness (SSA).

Primary POC: Robert Johnson, Phone: (505) 846-6699

Alternate POC: Capt. Thomas Donigan: 505 846 1791

9. Optical System Modeling and Simulation: This includes software systems designed to model optical systems, including adaptive optics and other varieties of beam control, using wave optics, scattering, and other optical design codes.

Primary POC: Mala Mateen, Phone: (505) 846-0464

10. Quantum Computer Technology: This includes advanced quantum devices and methods that exploit quantum entanglement to achieve reliable and efficient operation, such as (A) quantum sensors for efficient surveillance for space situational awareness, (B) quantum algorithms for computational plasma dynamics (including plasma dynamics ranging from the solar dynamo to space weather modeling and non-Abelian fluid dynamics ranging from spinor superfluid to high-temperature superconductor quantum simulation), and (C) quantum computers, involving long-lived protected quantum memories or topological processing modes, offering a light-weight platform for efficient information processing with a low-power space- deployable architecture. Only quantum information devices and methods that require a full quantum theory treatment for the basis of an efficient space-related application will be considered viable candidates.

Primary POC: Jeffrey Yepez, Phone: (808) 891-7752

C. SPACE VEHICLES TECHNOLOGY AREA DESCRIPTIONS:

1. Structures: This includes structural design for spacecraft and launch vehicle structural subsystem including advanced designs for spacecraft and launch vehicle structural subsystems and synergistic effect of structural components upon all primary spacecraft or launch vehicle in addition to satellite dispensers, inflatable optical structures, temperature critical structures, and vibration isolation and control and advanced manufacturing.

Primary POC: Andrew Williams, Phone: (505) 846-0396

Alternate POC: Jeremy Banik, Phone: (505) 846-9369

2. Space power: This includes development of thinned-film solar cells, advanced multi-junction, and quantum leap concepts to entail next generation technologies with potential to qualitatively and quantitatively enhance advanced space power technologies and their metrics such as novel concept thinned-film multijunction devices, multijunction solar cells, and other complimentary technologies such as storage devices, space power components, and power and data distribution systems.

Primary POC: John Merrill, Phone: (505) 853-3427

Alternate POC: Dave Wilt, Phone: (505) 846-2462

3. Communications Guidance Navigation and Control: This includes advanced technologies in the areas of optical communications, reconfigurable communications, and advanced RF communications; precision satellite guidance, navigation, control, and autonomy; GNC system modeling and simulation, constellation development and precision formation flying.

Primary POC for Communications: Steven Lane, Phone: (505) 846-9944
Primary POC for GNC: Scott Erwin, Phone: (505) 846-9816
Alternate POC for Both Areas: Capt Costantinos Zagaris, Phone: (505) 853-5327

4. Space Sensors: This includes modeling, design, growth, processing, and characterization of space-based detectors that cover portions or the entire visible to long wave infrared band, read-out integrated circuit (ROIC) technologies that illustrate low read noise reflective of the needs for space applications, and radiation/optical hardening of detector/ROIC technologies as well as monolithic devices.

Primary POC: Vince Cowan, Phone: (505) 853-4591
Alternate POC: Chris Morath, Phone: (505) 846-1603

5. Multisensory Information Fusion: This includes development and implementation of methodologies and systems for fusion of space related information. This includes accounting for uncertainty in information sources through confidence level estimation.

Primary POC: Paul Zetocha, Phone: (505) 853-4114
Alternate POC: Jeremy Murray-Krezan, Phone: (505) 846-3950

6. Thermal management: This includes advancing payload thermal management technology to include thermal component efficiency improvements through physics based experimentation, theory, modeling and simulation. Creating tools to automate data extraction/insertion among various thermal software programs is also of interest.

Primary POC: Andy Williams, Phone: (505) 846-0396
Alternate POC: Tom Fraser, Phone: (505) 846-9630
Alternate POC: Christopher Dodson, Phone: (505) 853-5938
Alternate POC: Paul LeVan, Phone: (505) 846-9959

7. Electronics/Radiation Effects/Protection: This includes improving performance of space electronics, reduce / eliminate the gap between space/terrestrial electronics through breakthroughs in materials, devices, processes, packaging, and architecture, make high-performance space electronics more affordable and available and simplify the implementation of complex systems using breakthroughs in reconfigurable concepts, electronic devices, and architecture. This includes studying space radiation effects on various electronics components and providing space electronics components maximum failure tolerance for such effects.

Primary POC: Keith Avery, Phone: (505) 846-0210
Alternate POC: Gabriel Mounce, Phone: (505) 846-4741

8. Space Environment: This includes research to attribute and mitigate space environment impacts to space vehicles and the radio signals through which they provide services to their users, the specification and forecast of relevant space environmental parameters to enable those tasks, and supporting technologies. It includes the influence of the space environment on satellite detection, tracking, identification and characterization.

Primary POC: Cassandra Fesen, Phone: (505) 846-1654
Alternate POC: Adrian Wheelock, Phone: (505) 846-4642

9. Space System Modeling and Simulation: This includes war gaming, cloud computing solutions for M&S, and technology assessment in addition to space systems modeling and analysis.

Primary POC: Capt Klayton Bobsein, Phone: (505) 853-7736

Alternate POC: Maj Dan Walters, Phone: (505) 853-4123

10. Quantum Technologies: This includes laser cooling techniques, Bose-Einstein condensate production, atom interferometry, atom-optics, atom accelerometers/gravimeters, atom gyroscopes, atom magnetometers, and atomic trapping techniques to support these technologies. This subject also includes atomic clocks and frequency standards, frequency combs to support atomic clock RF generation or dissemination and spectroscopy grade lasers and photonic technology to support these research areas. This should include theory, modeling and simulation as well as hardware development and testing for these research areas.

Primary POC: John Burke, Phone: (505) 853-3680

Alternate POC: Lawrence Robertson, Phone: (505) 846-7687

II. Deliverable Items:

1. Interim Performance Reports: Quarterly or Semi-Annual
2. Annual Performance Reports
3. Financial (Reimbursement) Reports: Quarterly
4. Final Scientific and Technical Report: at technical completion
5. Other: None anticipated

III. Schedule:

1. Overall effort: Specified on individual award
2. Deliverable Items: Specified on individual award
3. Software: None anticipated
4. Hardware: None anticipated

IV. Other Requirements:

1. Program security classification: Unclassified
2. TEMPEST Requirements: Not Applicable
3. Export Control: None anticipated

V. Other Information:

1. Government Furnished Property (GFP) availability: TBD (proposal specific)
2. Base Support/ Network Access: TBD (proposal specific)
4. Minimum Data Rights Desired:
 - a. Technical Data Government Purpose Rights
 - b. Non-Commercial Software (NCS): Government Purpose Rights
 - c. NCS Documentation: None anticipated
 - d. Commercial Computer Software Rights: None anticipated

The Air Force Research Laboratory is engaged in the discovery, development, and integration of warfighting technologies for our air, space, and cyberspace forces. As

such, rights in technical data and NCS developed or delivered under this award are of significant concern to the Government. The Government will therefore carefully consider any restrictions on the use of technical data, NCS, and NCS documentation which could result in transition difficulty or less-than full and open competition for subsequent development of this technology.

In exchange for paying for development of the data, the Government expects technical data, NCS, and NCS documentation developed entirely at Government expense to be delivered with Unlimited Rights.

Technical data, NCS, and NCS documentation developed with mixed funding are expected to be delivered with at least Government Purpose Rights. Offers that propose delivery of technical data, NCS, or NCS documentation subject to Government Purpose Rights should fully explain what technical data, NCS, or NCS documentation developed with costs charged to indirect cost pools and/or costs not allocated to a Government contract will be incorporated, how the incorporation will benefit the program, and address whether those portions or processes are segregable. The Government expects that delivery of technical data, NCS, and NCS documentation subject to Government Purpose Rights will fully meet program needs.

Offers that propose delivery of technical data, NCS, or NCS documentation subject to less than Government Purpose Rights (Limited Rights, Restricted Rights, or Specifically Negotiated License Rights), the proposal must explain what technical data, NCS, or NCS documentation developed with costs charged to indirect cost pools and/or costs not allocated to a Government award will be delivered/incorporated and how the incorporation will benefit the program.

Assertions must be completed with specificity with regard to each item, component, or process listed. Nonconforming assertions lists will be rejected.

5. Protection of Human Subjects: None anticipated

VI. AWARD INFORMATION

A. Anticipated Funding: Multiple cooperative agreement awards of various values are anticipated with a period of performance ranging from one to three years. Anticipated funding for the program (not per agreement or award) is \$24.5M over the BAA lifespan with funding allocations anticipated as follows: \$24.5M; FY 16: \$4.1M; FY 17: \$5.1M; FY 18: \$5.1M; FY 19: \$5.1M FY 20: \$5.1M. This funding profile is an estimate only and not a contractual obligation for funding. All funding is subject to change due to Government discretion and availability. Potential offerors should be aware that due to unanticipated budget fluctuations funding in any or all areas may change with little or no notice.

B. Anticipated Number of Awards: The Air Force anticipates multiple awards. However, the Air Force reserves the right to make a single award, more than one award, partial award(s), or no awards pursuant to this BAA.

C. Anticipated Award Date: A typical award is 110 days after receipt of a proposal(s). This BAA will remain open for 5 years (18 Dec 2020) or until the ceiling value is expended (whichever occurs first).

VII. ELIGIBILITY INFORMATION

A. Eligible Offeror/Applicants: U.S and U.S. territory educational institutions are eligible to submit proposals in response to this announcement.

B. All proposed grants must meet criteria for public purpose in accordance with 31 CFR 6305.

C. Cost Sharing or Matching: Cost sharing is not anticipated

D. Other:

1. Foreign participation: A foreign disclosure review will be accomplished on a proposal specific basis. Foreign national participation should not reach a level of technology where it would be difficult to proceed to the next phase of the program without foreign national involvement. In the absence of an approved export license, foreign national participation is limited to those aspects of the project that can be considered fundamental research, e.g. public
2. You may be ineligible for award if all requirements of this announcement and any amendments are not met as identified above.

VIII. PROPOSAL/APPLICATION AND SUBMISSION INFORMATION:

A. Application Package:

Proposals submitted shall be in accordance with this announcement. There will be no other announcement issued in regard to this requirement. The Government intends to evaluate proposals and may award all, part, or none of the proposal(s) received without negotiation/discussion; however, the Government reserves the right to negotiate with those offeror(s) whose proposal is selected for funding.

Offerors should be alert for any BAA amendments that may permit extensions to the proposal submission date or make other changes. There is no additional information to be provided.

For additional information, a copy of the Broad Agency Announcement (BAA) Guide for Industry issued Mar 2015 can be found at <http://www.wpafb.af.mil/shared/media/document/AFD-150518-026.pdf>. This guide is specifically designed to assist the offeror in understanding the BAA proposal process which is similar to the BAA proposal process which does not have its own guide.

Please Note: If you intend to propose a grant or assistance instrument, Section VIIIB. below discusses how to find the grant opportunity, prepare the cover page, and complete the certification. This section also describes the process for electronic submission of proposals for grants and cooperative agreements.

B. Proposals for Cooperative Agreements

1. Grant Opportunity: Go to <http://Grants.Gov> to find the grant opportunity (See "Find Grant Opportunities" section). The initial screen will provide the synopsis for that specific grant opportunity. To view the entire opportunity open the "Full Announcement" box in the upper center of the synopsis page and select from the documents available under "Announcement Group." NOTE: <http://Grants.Gov> has tools and guiding documents in the left margin under "Applicant Resources" to help you find and apply for grant opportunities.
2. Proposal Cover Page – SF 424 (R&R) Form: All proposals for grants or assistance, whether submitted electronically or in hard copy must include an SF 424 (R&R) as the cover page. The SF 424 (R&R) should be downloaded from the "Application" box in the upper right hand corner of the synopsis page. Click on "download" under the column "Instructions and Application." Select "Download Application Package" and complete the SF 424 (R&R).

3. Certifications: To access the requisite Certifications, select the “Application” box in upper right hand corner of the synopsis page. Click on “Instructions and Application” and select “Download Application Instructions” to view the Certifications. To complete the Certifications you must check Block 18 of the SF 424 (R&R) and by signing it (either by pressing the “submit” button for Grants.gov or by hand if submitting it in hard copy), you are certifying that you have read and agree to abide by the terms in the Certifications. You do not need to submit any additional documentation unless you have lobbying activities to disclose on an SF–LLL.
4. Proposals for Grants or Assistance Instruments: Proposals for grants or assistance instruments may be submitted electronically through the Grants.gov government- wide electronic portal. **You must notify your Agreements Specialist before proposal submission.**
5. For Electronic Submission:
 - a. Advance Preparation – Electronic proposals must be submitted through Grants.gov. There are several one-time actions your organization must have completed. Long before the proposal submission deadline, you should verify that the persons authorized to submit proposals for your organization have completed these actions. If not, it may take them up to **21 days** to complete the actions before they will be able to submit proposals.
 - b. Electronic Submission Process: The process your organization must complete includes obtaining a Dun and Bradstreet Data Universal Numbering System (DUNS) number (<http://fedgov.dnb.com/webform>) and registering with SAM (<http://www.sam.gov>). For more details, go to <http://www.grants.gov/web/grants/applicants/organization-registration.html>.
 - c. Your organization’s E-Business POC, identified during SAM Registration, must authorize someone to become an Authorized Organization Representative (AOR). This safeguards your organization from individuals who may attempt to submit proposals without permission. *Note: In some organizations, a person may serve as both an E- Business POC and an AOR.*
 - d. The Grants.gov Organization Registration Checklist is located at <http://www.grants.gov/documents/19/18243/GrantsgovOrganizationRegistrationGuide.pdf/be70525d-59aa-45ee-b196-5e8951faca0a> to guide you through the process.
 - e. Grants.gov supports Adobe Reader version 9.0.0. Learn more about Adobe software compatibility with Grants.gov and ensure that your version of Adobe Reader or Adobe Acrobat can be used to download, complete, and submit grant applications. Follow the following link for instructions on how to obtain a free version of the software <http://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html>. **All attachments to all Grants.gov forms must be submitted in PDF format** (Adobe Portable Document Format). To convert attachments into PDF format, Grants.gov provides a list of PDF file converters at http://www.grants.gov/help/download_software.jsp.
 - f. Should you have questions relating to the registration process, system requirements, how an application form works or the submittal process, call Grants.gov at 1-800-518-4726 or support@Grants.gov.

6. Submitting the Electronic Proposal:

- a. Application forms and instructions are available at Grants.gov. To access these materials, go to <http://Grants.gov>. Select “Apply for Grant”, and then select “Download Application Package”. Enter the CFDA number (typically 12.800). You should also enter the BAA number, and then follow the prompts to download the application package.
- b. The applicant will receive a confirmation page upon completing the submission to Grants.gov. This confirmation page is a record of the time and date stamp that is used to determine whether the proposal was submitted by the deadline. A proposal received after the deadline is “late” and will not be considered for an award.

C. Content and Form of Submissions for Full Proposals:

1. Technical/Management Proposal:

- a. Page Limitation: The technical proposal including a non-proprietary Contractor Statement of Work (C-SOW) shall be limited to 20 pages single spaced, double-sided, 8.5 by 11-inch pages. Select, an easy to read font no smaller than 12 pitch fixed or proportional font size 10 or larger. Smaller type may be used in figures and tables as long as it is clearly legible. The page limitation includes all information i.e., indices, photographs, foldouts (2 page), appendices, attachments, resumes, C-SOW, etc. Each printed side counts as one page. Blank pages, title pages, tables of content, lists, tabs or cover sheets, Representations and Certifications, and the Air Force Proposal Adequacy Checklist are not included in the page count. The Government will not consider pages in excess of this limitation. Please note: The Government will check the proposal and C-SOW for conformance to the stated requirements. Any pages in excess of the stated page limitation after the format check will not be considered.
- b. The proposal shall include a discussion of the nature and scope of the research and the technical approach. Additional information on prior work in this area, descriptions of available equipment, data and facilities and resumes of personnel who will be participating in this effort should also be included as attachments to the technical proposal. This volume shall include a C-SOW detailing the technical tasks proposed to be accomplished under the proposed effort and suitable for contract incorporation. **Do not include any proprietary information in the C-SOW.** Refer to the Broad Agency Announcement (BAA) Guide issued March 2015 to assist in C-SOW preparation. If Government Furnished Property is requested you are required to submit the following information with your offer—
 - (1) A list or description of all Government property that the offeror or its subcontractors propose to use. The list shall identify the accountable contract/award under which the property is held and the authorization for its use (from the contracting/awards officer having cognizance of the property);
 - (2) The dates during which the property will be required for use (including the first, last, and all intervening months) and, for any property that will be used concurrently in performing two or more contracts/awards, the amounts of the respective uses in sufficient detail to support prorating the rent;
 - (3) The voluntary consensus standard or industry leading practices and standards to be used in the management of Government property, or existing property management plans, methods, practices, or procedures for accounting for property.

c. Any questions concerning the technical/management proposal or C-SOW preparation shall be referred to the Technical POC.

2. Cost/Business Proposal:

Separate the proposal into a cost section and business section. The business section should contain all business aspects to the proposed contract, such as type of contractual instrument, any exceptions to terms and conditions of the announcement, any information not technically related, etc. Provide rationale for exceptions. Identify any technical data that will be delivered with less than unlimited rights. Cost proposals have no page limitations; however, offerors are requested to keep cost proposals under 50 pages as a goal. The proposal shall be furnished with supporting schedules and shall contain a labor hour breakdown per task. Refer to the BAA Guide for Industry for detailed proposal instructions.

3. Proposal Content Summary: You may be ineligible for award if all requirements of this announcement are not met on the proposal due date.

4. Proposal Submission Dates and Times: This BAA will remain open 5 years or until the ceiling value is expended (whichever occurs first). Proposals may be submitted at any time during the open period. However, prospective offerors/applicants must contact the technology points of contacts (TPOCs) to confirm funding is available for the technology area of consideration before submitting a proposal.

5. Funding Restrictions: The cost of preparing proposals in response to this announcement is not considered an allowable direct charge to any resulting award or any other award, but may be an allowable expense to the normal bid and proposal indirect cost specified in 2 CFR § 200.400 - 415. Incurring pre-award costs for ASSISTANCE INSTRUMENTS ONLY is as codified in 32 CFR Parts 21-37, respectively.

IX. PROPOSAL/APPLICATION REVIEW INFORMATION:

Evaluation Criteria: Proposals submitted under this BAA will be evaluated using the evaluation criteria below:

1. Technical merits of the proposed research and development.
2. Primary public purpose/Potential relationship of the proposed Research and Development to DoD
3. Funds availability

Cost realism and reasonableness shall also be considered to the extent appropriate as per 2 CFR 200, Subpart E, Cost Principles. No further evaluation criteria will be used to evaluate the proposals. The technical and budget proposals will be evaluated at the same time. The Government reserves the right to award all, part, or none of the technical/CSOW proposals received.

Review and Selection Process: The technical/management and cost/business proposals will be evaluated utilizing a peer or scientific review and categorized as follows:

Selectable: Proposals are recommended for acceptance if they demonstrate technical merit, importance to Air Force programs and sufficient funding is available, and normally are displaced only by other Highly Recommended proposals

Not Selectable: Proposal does not demonstrate technical merit, does not meet Air Force needs, or sufficient funding is not available.

X. AWARD ADMINISTRATION INFORMATION:

A. Award Notices:

Offerors will be notified whether their proposal is recommended for award, by letter or e-mail within 65 business days. The notification is not an issuance of award.

B. Administrative and National Policy Requirements:

Federal statutes or Executive Orders that apply to Federal or DoD assistance awards include, but are not limited to:

1. Nondiscrimination (e.g, Title VI of the Civil Rights Act, Title IX of the Educational Amendments of 1972, Age Discrimination Act of 1975, Section 504 of the Rehabilitation Act of 1973, EO 11246, 42 USC 4151);
2. Debarment and Suspension (Subpart C of the OMB guidance in 2 CFR part 180);
3. Environmental Standards (e.g., 42 USC 7401, Clean Air Act and 33 USC 1251 Clean Water Act, EO 11738 and EPA rules as Subparts J of 40 CFR part 32);
4. Drug Free Workplace (Drug Free Workplace Act of 1988);
5. Officials Not to Benefit (41 USC 22);
6. Preference for US Flag Carriers (49 USC 41102 and 49 USC 40118);
7. Military Recruiters (32 CFR § 22.520)
8. Unpaid Delinquent Tax Liability Or A Felony Conviction (Sections 744 and 745 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235))
9. Prohibition On Contracting With Entities That Require Certain Internal Confidentiality Agreements (Section 743 of Division E, Title VII, of the Consolidated and Further Continuing Resolution Appropriations Act, 2015 (Pub. L. 113-235))

XI. AGENCY CONTACTS

A. Questions of a technical nature shall be directed to the technical point of contact, as specified below:

Eunsook Hwang, PhD
AFRL/RDMX
3550 Aberdeen Ave SE
Kirtland AFB, NM 87117-5776
Telephone: (505) 846-8721
Email: eunsook.hwang.1@us.af.mil

B. Questions of a contractual/business nature shall be directed to the Agreements Specialist, as specified below:

Anne C. Green, Agreement Specialist
AFRL Det 8/RVKVE
3550 Aberdeen Ave SE
Kirtland AFB, NM 87117-5776
Telephone: (505) 846-5575
Email: anne.green.2@us.af.mil

C. Ombudsman: An ombudsman has been appointed to hear and facilitate the resolution of concerns from recipients, potential recipients, and others for this requirement. When

requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman does not affect the authority of the Program Officer, Grants Officer, or Approving Official. Further, the ombudsman does not participate in the evaluation of proposals, the award process, or the adjudication of protests or formal grant disputes. The ombudsman may refer the party to another official who can resolve the issue. Before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the Grants Officer for resolution. Consulting an ombudsman does not alter or postpone the timelines for any other processes (e.g., agency level grant protests, GAO grant protests, requests for debriefings, employee-employer actions, contests of OMB Circular A-76 competition performance decisions)

If resolution cannot be made by the Grants Officer, concerned parties may contact the AFRL ombudsmen: AFRL Ombudsman is Barbara G. Gehrs, Director of Contracting, AFRL/PK, 1864 4th Street, Bldg 15, Room 225, Wright-Patterson AFB, OH, 45433-7130, (937) 904-4407, email: barbara.gehrs@us.af.mil.

Do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Grants Officer.

XII. OTHER INFORMATION

A. Support Contractors: Only Government employees will evaluate the proposals for selection. Offerors are advised that employees of commercial firms under contract to the Government may be used to administratively process proposals, monitor contract performance, or perform other administrative duties requiring access to other contractors' proprietary information. These support contracts include nondisclosure agreements prohibiting their contractor employees from disclosing any information submitted by other contractors or using such information for any purpose other than that for which it was furnished. Any objection to administrative access must be in writing to the Contracting/Grants Officer and shall include a detailed statement of the basis for the objection.

B. Communication: Dialogue between prospective offerors and Government representatives is encouraged until submission of proposals. Discussions with any of the points of contact shall not constitute a commitment by the Government to subsequently fund or award any proposed effort. Only Contracting Officers are legally authorized to commit the Government.

C. Wide Area Work Flow Notice: Wide Area Work Flow (WAWF) has been designated as the Department of Defense standard for electronic invoicing and payment. To facilitate this effort for Universities and Nonprofit 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 Grantee participates in the PayWeb system, the Grantee shall submit an electronic request for payment to the Administrative Grants Officer (AGO) at the Administrative Office in Block 12 of the award, using the standard PayWeb processes.

Participation in the PayWeb system requires the Grantee 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. If you have questions or require technical assistance in implementing your certificate, contact the Navy PKI Help Desk

at 1-800-304-4636. The Grantee shall Contact the AGO at the Administrative Office in Block 12 of the award for instructions on how to register and use WAWF and PayWeb

Electronic submission of payment requests requires the Grantee to register in WAWF and have the appropriate CAGE code activated. Please note that each Grantee must be registered in SAM and have an Electronic Business Point of Contact (EBPOC) set up to approve new registrations within their Institution. Electronic Business Point of Contact (EBPOC) is responsible for activating the CAGE code in WAWF by calling 1-866-618-5988. Once the Grantee's CAGE Code is activated, the CCR EBPOC will self-register in WAWF (<https://wawf.eb.mil>) and follow the instructions for a group administrator. The ONR Regional Offices will assist in this process. The ONR Regional Office is listed as the Administrative Office in Block 12 of the award.

D. Property: Any award resulting from this announcement may contain articles for governing management and disposition of property as contained 2 CFR § 200.310 - 316

F. Standards for Financial Management Systems: 2 CFR §200.300-309 is hereby incorporated by reference.

G. Proposal Content Checklist: You may be ineligible for award if all requirements of this announcement are not met.

1. Proposals are due to the specified point of contact. See Section I B & C
2. Proposal page limits are strictly enforced. See Section VIII C.
3. Completed Representations and Certifications. See Attachment B.
4. The Technical Proposal must be submitted in the format specified in Section VIII C I.
5. The Cost/Business Proposal must contain all information described in the Content and Form of Submission for Full Proposals. See Section VIII C. 2. and Attachment C.
6. For any subcontracts proposed, the Cost/Business Proposal must contain a subcontractor analysis IAW §200.317-326.
7. The Cost/Business Proposal must contain any exceptions to the sample Model Cooperative Agreement Terms and Conditions. See Attachment A for model cooperative agreement. However, be advised that the document awarded may include articles in addition to those in the models, and/or some of articles in the models may be deleted, depending on the specific circumstances of the individual program. Any additions or deletions will be discussed with the offeror prior to award of the document. In the interest of streamlining and in order to be in position to award within days of completion of the technical evaluation, it is imperative that you review the model contract appropriate for your business type and provide with your proposal any exceptions to terms and conditions.

XIII. ATTACHMENTS

Attachment A – Model Grant

Attachment B - Representations and Certifications

Attachment C - RVK Assistance Budget Proposal Instructions

Grant/Cooperative Agreement Award

1. AWARD NO. FA9453-15-2-MODL		2. EFFECTIVE DATE		3. PURCHASE REQUEST NO. See Block 16		4. CFDA NO. 12.800		PAGE OF 1 3	
5. ISSUE BY AFRL/RVKXX CODE FA945X AF RESEARCH LABORATORY (DET 8) 3550 ABERDEEN AVE. SE KIRTLAND AFB, NM 87117-5776 <<BUYER NAME>> <<BUYER PH#>> <<BUYER NAME>>@us.af.mil				6. AWARDED TO CAGE CODE				7. AUTHORITY 10 U.S.C. 2358	
								8. PERIOD OF PERFORMANCE ____ Months (See Page 2 for details)	
9. SCOPE / AGREEMENT TERMS The Recipient shall furnish the necessary qualified personnel, materials, facilities, supplies and services to perform research in accordance with the Recipient's Statement of Work entitled "TBD", hereby incorporated as Attachment 1.									
10. RECIPIENT PRINCIPAL INVESTIGATOR TBD					11. OTHER SPONSORING AGENCY(S)				
12. ADMINISTRATIVE OFFICE CODE N66018 OFC OF NAVAL RSCH (ONRRO) SAN DIEG SAN DIEGO REGIONAL OFFICE 140 SYLVESTER RD BLDG 140 RM 218 SAN DIEGO CA 92106-521			13. PAYING OFFICE CODE 3000 DEF SEC COLUMBUS AF ENTITLEMENTS P.O.BOX 369024 COLUMBUS OHIO, 43236-9024 CCO-DEF-SYLS-OB@DEFAS.MIL 1-800-368-4511, OP 24 OP 24			14. STAFF JUDGE ADVOCATE OFFICE AFNWC/JAN 3550 ABERDEEN AVE SE KIRTLAND AFB, NM 87117-5776 PHONE: 505-846-5172			
15. GOVT PROGRAM MANAGER (Name, Org, Tel, Email) TBD									
16. ALLOCATED FUNDING: The following funds with associated Account and Significant Reference Number(s) are allotted to this agreement:									
<u>ACRN</u>		<u>FUND CITATION(S)</u>						<u>AMOUNT</u>	
SPECIAL INSTRUCTIONS: PAYMENT WILL BE MADE BY ELECTRONIC FUNDS TRANSFER.									
PAYING OFFICE INSTRUCTIONS: DOD PGI 204.7108 PAYMENT INSTRUCTIONS--CONTRACT-WIDE: SEQUENTIAL ACRN ORDER									
PAYMENT SCHEDULE (if applicable):									
17. TOTAL FUNDS OBLIGATED		Government Share		Recipient Share		Total		18. INVOICE INSTRUCTION	
		\$0.00		\$0.00		\$0.00			
19. AMOUNT OF AWARD		Government Share		Recipient Share		Total			
		\$0.00		\$0.00		\$0.00			
20. OPTIONS		Government Share		Recipient Share		Total		21. PERIOD	
FOR THE RECIPIENT					FOR THE UNITED STATES OF AMERICA				
22. SIGNATURE					23. SIGNATURE				
24. NAME AND TITLE			25. DATE SIGNED		26. NAME AND TITLE			27. DATE SIGNED	
					GRANTS OFFICER				

ALLOCATED FUNDING		
ACRN	FUND CITATION	AMOUNT
AA	57 x3600 29x xxxx xxxxxx xxxxxx 82100 xxxxxx 503000 F03000 xxxxxx PR/MIPR: F2KBAxxxxxBxxx JON: xxxxxxxx Descriptive Data: FSR: xxxxxx PSR: xxxxxx DSR: xxxxxx	\$ _____

Block 8 continued:

PERIOD OF PERFORMANCE

____ months for Technical Completion plus 3 months for Final Performance Report (see article 7.040)

DELIVERY/SHIPMENT ADDRESSES:

AFRL/xxxx

Attn: Program Manager
3550 Aberdeen Ave SE
Kirtland AFB, NM 87117-5776
Mark For: FA9453-xx-x-xxxx

AFRL Det 8/RVKxx

Attn: Grants Specialist
3350 Aberdeen Ave SE
Kirtland AFB, NM 87117-5776
Mark For: FA9453-xx-x-xxxx

Office of Naval Research (ONR)

xxxx Regional Office address
Mark For: FA9453-xx-x-xxxx

<u>ATTACHMENTS</u>	<u>PGS</u>	<u>DATE</u>	<u>TITLE</u>
ATTACHMENT 1	16	15 SEP 2015	TERMS AND CONDITIONS
ATTACHMENT 2	TBD		STATEMENT OF WORK ENTITLED " _____ "
ATTACHMENT 3	TBD		AGREED-TO BUDGET

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1.00 ADMINISTRATIVE REQUIREMENTS AND ORDER OF PRECEDENCE (MAR 2015)

(a) This award is governed by the guidance in 2 Code of Federal Regulations (CFR) 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 1103, "Interim Grants and Cooperative Agreements Implementation of Guidance in 2 CFR part 200" (79 FR 76047, December 19, 2014), all of which are incorporated herein by reference. Provisions of Chapter I, Subchapter C of Title 32, CFR, "DoD Grant and Agreement Regulations," other than parts 32 and 33, continue to be in effect and are incorporated herein by reference, with applicability as stated in those provisions.

(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 1103
- (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.

2.00 TERMINATION (MAR 2015)

(a) 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.

(b) 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.

(c) 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.

(d) 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.

(e) 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.

(f) 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.

(g) Notwithstanding the above, for security or safety reasons or in the case of a serious breach that

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15 SEP 2015

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) Provisions applicable to a recipient that is a private entity.

(1) You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not—

(i) Engage in severe forms of trafficking in persons during the period of time that the award is in effect;

(ii) Procure a commercial sex act during the period of time that the award is in effect; or

(iii) Use forced labor in the performance of the award or subawards under the award.

(2) We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity —

(i) Is determined to have violated a prohibition in paragraph (a)(1) of this award term; or

(ii) Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph (a)(1) of this award term through conduct that is either—

(A) Associated with performance under this award; or

(B) Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 1125.

(b) Provision applicable to a recipient other than a private entity. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—

(1) Is determined to have violated an applicable prohibition in paragraph (a)(1) of this award term; or

(2) Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph (a)(1) of this award term through conduct that is either—

(i) Associated with performance under this award; or

(ii) Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 1125.

(c) Provisions applicable to any recipient.

(1) You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph (a)(1) of this award term.

(2) Our right to terminate unilaterally that is described in paragraph (a)(2) or (b) of this section:

(i) Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and

(ii) Is in addition to all other remedies for noncompliance that are available to us under this award.

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(3) You must include the requirements of paragraph (a)(1) of this award term in any subaward you make to a private entity.

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

(1) "Employee" means either:

(i) An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or

(ii) Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.

(2) "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

(3) "Private entity":

(i) Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.

(ii) Includes:

(A) A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).

(B) A for-profit organization.

(4) "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

2.02 ENFORCEMENT (MAR 2015)

In addition to the remedies identified in the article entitled Termination, the Government may use any of the remedies identified in 2 CFR § 200.338 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)

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.

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3.01 PROPERTY SYSTEM (MAR 2015)

The recipient's property system shall meet the standards as set forth in 2 CFR § 200.310 - 316.

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: FA945x-xx-xxxx
TYPE OF DOCUMENT: NON PROCUREMENT INSTRUMENT (NPI) VOUCHER
CAGE CODE: TBD
ISSUED BY DODAAC: FA945x
ADMIN DODAAC: TBD
GOVERNMENT PROGRAM MANAGER: See Block 15
SERVICE ACCEPTOR OFFICE DODAAC: N/A
PAY OFFICE DODAAC: F03000
APPROVAL OFFICE DODAAC: TBD
SEND E-MAIL NOTIFICATIONS for completed SF 270/GRANT VOUCHER: AFRL Program Manager (See Block 15)

(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 12 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 12 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

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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 12 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 12 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 Final Performance Report.

4.03 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.

4.04 COST PRINCIPLES (MAR 2015)

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.

4.05 STANDARDS FOR FINANCIAL MANAGEMENT (MAR 2015)

The recipient's financial management system shall comply with the standards identified in 2 CFR § 200.302.

4.06 AUDIT REQUIREMENTS (MAR 2015)

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.

4.07 RETENTION AND ACCESS TO RECORDS (MAR 2015) – ELECTRONIC FORMAT ALTERNATE

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 § 200.333. Copies in either electronic or computer format may be substituted for original records.

4.09 REVISION OF BUDGETS AND PROGRAM PLANS - PRIOR APPROVALS AUTHORIZED (APR 2015)

(a) The budget plan is the financial expression of the program as approved during the award process.

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(b) The recipient shall obtain Grants Officer's prior written approval of the Government before making any of the following project changes:

(1) A change in scope or objectives of the project as stated in the approved application or approved modifications thereto, such as a change in the phenomenon under study, even if there is no associated budget revision.

(2) The absence or change of the Principal Investigator/Project Director (PI/PD). If the approved PI/PD severs connection with the recipient or otherwise relinquishes active direction of the project (either permanently or for a continuous period of more than 3 months or a 25 percent reduction in time devoted to the project), then the recipient shall either:

(i) Appoint a replacement PI/PD with Government approval; or

(ii) Obtain approval for a reduction of time devoted to the project; or

(iii) Relinquish the award (by mutual agreement in accordance with the article entitled Termination).

(3) The need for additional Federal funding. The maximum obligation of the Government to the recipient is the amount indicated in the Award as obligated by that agency. Nothing in this article or other articles of this agreement requires the awarding agency to make available any additional funds or limits its discretion with respect to the amount of funding to be provided for the same or any other purpose.

(4) The transfer, by contract or other means, of a significant part of the research or substantive programmatic effort, unless described in the approved application or approved modifications to the award. With its request for approval, the recipient shall submit a justification, a description of the scientific/technical impact on the project, and a budget estimate.

(5) Any extensions to this agreement.

(c) The recipient is authorized to do any one or more of the following:

(1) Incur pre-agreement costs 90 days prior to award. All pre-award costs are incurred at the recipient's risk (i.e., the Government is under no obligation to reimburse such costs if for any reason the recipient does not receive an award or if the amount of the agreement is less than anticipated and inadequate to cover such costs).

(2) Carry forward unobligated balances to subsequent funding periods. Any unobligated balance of funds which remains at the end of any funding period, except the final funding period of the project, shall be carried over to the next funding period, and may be used to defray costs of any funding period of the project in addition to the current year's funding. No separate or specific awarding agency prior approval is required to authorize use of the funds since the carryover of unobligated balances is automatic.

(d) The recipient shall provide revised budget information to the Government if there are any significant changes in the size or scope of the project or in the originally negotiated total estimated cost for the project period.

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

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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 with a courtesy copy (cc:) to the government Program Manager/Project Manager. 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 Manager.

(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 Manager.

(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 with a cc: to the government Program Manager/Project Manager.

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) The recipient hereby grants to the U.S. Government a royalty free, world-wide, nonexclusive, irrevocable license to use, modify, reproduce, release, perform, display or disclose any data for Government purposes.

(c) 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.

(d) 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.

6.02 EXPORT CONTROL (MAR 2015)

(a) Access to the technology developed under this agreement by foreign firms, institutions or individuals shall be controlled by the recipient under applicable U.S. export control laws.

(b) The recipient shall receive the grants officer approval before assigning or granting access to any work, equipment, or technical data generated or delivered under this agreement to foreign persons or their representatives. The notification shall include the name and country of origin of the foreign person or representative, the specific work, equipment, or data to which the person will have access.

7.00 INTERIM PERFORMANCE REPORTS (MAR 2015)

(a) Recipients shall submit Interim Performance Reports in accordance with this article and 2 CFR § 200.328. 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. Submission via unencrypted or unsecure email is not permitted. The recipient shall submit one copy of the Interim Performance Report to:

(1) Administrative Grants Officer;

(2) AFRL Grants Officer;

(3) AFRL Program Manager; and

(4) any other Program Manager or Sponsor's Program Manager identified in the Award.

(d) Mark all data delivered with the following statement: **TBD <<INSERT DISTRIBUTION STATEMENT>>**

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) Administrative Grants Officer;

(2) AFRL Grants Officer;

(3) AFRL Program Manager; and

(4) any other Program Manager or Sponsor's 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

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of the work conducted under this award. One copy of all publications (including, but not limited to journal articles and conference papers) resulting from the project shall be forwarded to the AFRL program manager as it becomes available so AFRL may prepare it for submittal to the Defense Technical Information Center (DTIC). **Under no circumstances shall the recipient submit publications arising from this Agreement directly to DTIC.**

(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 Air Force Research Laboratory (AFRL) under agreement number FA9453-xx-x-xxxx. 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 Air Force Research Laboratory (AFRL) and or the U.S. Government."

7.03 FINAL PERFORMANCE REPORT (MAR 2015)

Under no circumstances shall the recipient submit the Final Performance Report, directly to DTIC

(a) Recipients shall submit the Draft Final Performance Report and CRC Final Performance Report in accordance with this article and 2 CFR § 200.328. All publications shall contain both the Acknowledgement and the Disclaimer included in Article 7.02 above, 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 entire period covered by the agreement. Each of the topics listed in the article entitled "Interim Performance Reports" shall be addressed as appropriate.

(2) Format: Submit the Draft Final Performance Report and Final Performance Report and Camera Ready Copy (CRC)-in the following format:

(i) The report must have a cover page that includes the Agreement Number, authors' names, recipient's institution and address, as well as all markings required by paragraph (b) below.

(ii) Prepare a Standard Form (SF) 298, Report Documentation Page. The SF 298 can be found at <http://www.kirtland.af.mil/prs>.

(A) Block 12 - Insert the Distribution Statement as shown in para (b) below.

(B) Block 13 - Include an abstract (not to exceed 3,000 characters and spaces) which should include 1) the purpose; 2) scope; 3) methods; 4) results; 5) conclusions; and 6) recommendations reached during the agreement period. Style is to be third person singular using past tense. Jargon, acronyms, special symbols or notations, subscripts, mathematical symbols or foreign alphabet letters are not permitted.

(iii) The report shall be prepared in accordance with the most current AFRL ANSI/NISO Standard Z39.18-2005 guidance, or other most current report preparation guidance, found at <http://www.kirtland.af.mil/prs>.

(iv) Submission -

(A) The contractor shall deliver two editable electronic copies of the report. The electronic copies shall be an editable .pdf file and the most current version of Microsoft Word. The

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distribution statement shown in para (b) below must be included at the bottom of every page except the cover and SF Form 298. A CD-ROM (CD-R) is the acceptable media for submittal (CD-RWs or flash drives are not acceptable). Electronic media shall be marked I.A.W. the AFRL ANSI/NISO Standard Z39.18-2005 guidelines, or other most current report preparation guidance. Submission via unencrypted or unsecure email is not permitted.

(B) **DRAFT FINAL PERFORMANCE REPORT:** The recipient shall submit the Draft Final Performance Report (with letter of transmittal) within 30 days of technical completion of the agreement. The Government will review and provide comments back for any revisions necessary within 60 days of technical completion date of the agreement. The recipient will take note of the revisions and incorporate any required changes into the CRC/Final Performance Report.

- i. Administrative Grants Officer (transmittal letter only)
- ii. AFRL Grants Officer (transmittal letter only)
- iii. AFRL Program Manager; and
- iv. Any other Program Manager or Sponsor's Program Manager identified in the

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(C) **CRC/FINAL PERFORMANCE REPORT:** The recipient shall submit the Final Performance Report (with letter of transmittal) within 90 days after technical completion of the agreement.

- i. Administrative Grants Officer (transmittal letter only)
- ii. AFRL Grants Officer (transmittal letter only)
- iii. AFRL Program Manager; and
- iv. Any other Program Manager or Sponsor's Program Manager identified in the

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(e) Mark all data delivered with the following statement: **TBD <<INSERT DISTRIBUTION STATEMENT>>**

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.fsrs.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.fsrs.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-

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- (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/execomp.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:

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- (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:
 - (i) 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)):
 - (i) Salary and bonus.
 - (ii) 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.

8.00 PROCUREMENT SYSTEM (MAR 2015)

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)

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)

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 UNIVERSAL IDENTIFIER REQUIREMENTS (MAR 2015)

(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 maintain the currency of your information in the SAM until you submit the final financial report required under this award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another award term.

(b) Requirement for Data Universal Numbering System (DUNS) Numbers: 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 DUNS number to you.

(2) May not make a subaward to an entity unless the entity has provided its DUNS number to you.

(c) Definitions: For purposes of this award term:

(1) System for Award Management (SAM) means the Federal repository into which an entity 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) Data Universal Numbering System (DUNS) number means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at <http://fedgov.dnb.com/webform>).

(3) Entity, as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:

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

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Federal entity.

(4) 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) The term does not include your procurement of property and services needed to carry out the project or program.

(iii) A subaward may be provided through any legal agreement, including an agreement that you consider a contract.

(5) Subrecipient means an entity that:

(i) Receives a subaward from you under this award; and

(ii) Is accountable to you for the use of the Federal funds provided by the subaward.

9.00 MILITARY RECRUITING ON CAMPUS (MAR 2015)

(a) As a condition for receipt of funds available to the Department of Defense (DoD) under this award, the recipient agrees that it is 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:

(1) The Secretary of a Military Department from maintaining, establishing, or operating a unit of the Senior Reserve Officers Training Corps (in accordance with 10 U.S.C. 654 and other applicable Federal laws) at that institution (or any subelement of that institution);

(2) Any student at that institution (or any subelement of that institution) from enrolling in a unit of the Senior ROTC at another institution of higher education;

(3) 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

(4) 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 subelement 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.

(b) If the recipient is determined, using the procedures in 32 CFR part 216, to be such an institution of higher education during the period of performance of this agreement, the Government will cease all payments of DoD funds under this agreement and all other DoD grants and cooperative agreements to the recipient, and it may suspend or terminate such grants and agreements unilaterally for material failure to comply with the terms and conditions of award.

9.01 ASSURANCES (MAR 2015)

(a) By signing or accepting funds under the agreement, the recipient assures that it will comply with applicable provisions of the following National policies on:

(1) PROHIBITING DISCRIMINATION—

(i) 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 DoD regulations at 32 CFR part 195;

(ii) 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;

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(iii) On the basis of handicap, in Section 504 of 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;

(iv) On the basis of sex or blindness, in Title IX of the Educational Amendments of 1972 (20 U.S.C. 1681, et. seq.).

(2) ENVIRONMENTAL STANDARDS—The Clean Air Act (42 U.S.C. 7401, et seq.) and Federal Water Pollution Control Act as amended (33 U.S.C. 1251, et seq.), as implemented by Executive Order 11738 (3 CFR, 1971-1975 Comp., p. 799). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency.

(3) DEBARMENT AND SUSPENSION—The recipient agrees to comply with the requirements regarding debarment and suspension in Subpart C of the OMB guidance in 2 CFR part 180, as implemented by the Department of Defense in 2 CFR part 1125. The recipient also agrees to communicate the requirement to comply with Subpart C to persons at the next lower tier with whom the recipient enters into transactions that are “covered transactions” under Subpart B of 2 CFR part 180 and the DoD implementation in 2 CFR part 1125.

(4) DRUG FREE WORKPLACE—The recipient agrees to comply with the requirements regarding drug-free workplace requirements in Subpart B (or Subpart C, if the recipient is an individual) of 32 CFR part 26, which implements sec. 5151-5160 of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 U.S.C. 701, et seq.).

(5) OFFICIALS NOT TO BENEFIT— No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this agreement, or to any benefit arising from it, in accordance with 41 U.S.C. 22.

(6) PROHIBITION ON USING FUNDS UNDER GRANTS AND COOPERATIVE AGREEMENTS WITH ENTITIES THAT REQUIRE CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS (ASD(RE) POLICY MEMO 01 JUN 2015)

(i) The Recipient may not require its 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 such employees or contractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

(ii) The Recipient must notify its employees, contractors, or subrecipients that the prohibitions and restrictions of any internal confidentiality agreements inconsistent with paragraph (i) of this award provision are no longer in effect.

(iii) The prohibition in paragraph (i) of this award provision 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.

(iv) If the Government determines that the recipient is not in compliance with this award provision, it:

(A) Will prohibit the recipient's use of funds under this award, in accordance with section 743 of Division E of the Consolidated and Further Continuing Resolution Appropriations Act, 2015, (Pub. L. 113-235) or any successor provision of law; and

(B) May pursue other remedies available for the recipient's failure to comply with award terms and conditions.

(b) The recipient shall obtain assurances of compliance from subrecipients.

ATTACHMENT B

**AIR FORCE RESEARCH LABORATORY
DIRECTED ENERGY AND SPACE VEHICLES DIRECTORATES**

**CERTIFICATIONS FOR APPLICATIONS FOR FEDERAL ASSISTANCE
(GRANTS AND COOPERATIVE AGREEMENTS)**
(Current as of 01 Sep 2015)

2 CFR §180.335 – Debarment and Suspension

(1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

(a) ☐ Are ☐ Are not presently excluded or disqualified;

(b) ☐ Have ☐ Have not been convicted within the preceding three years of any offenses listed in §180.800(a) or had a civil judgment rendered against you for one of those offenses within that time period;

(c) ☐ Are ☐ Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses listed in §180.800(a); or

(d) ☐ Have ☐ Have not had one or more public transactions (Federal, State or local) terminated within the preceding three years for cause or default.

10 USC 2320 – Rights in Technical Data

Identification And Assertion Of Use, Release, Or Disclosure Restrictions (derivative from DFARS 252.227-7017) (JAN 2011)

(a) The terms used in this provision are defined in 48 CFR 27.401.

(b) The identification and assertion requirements in this provision apply only to technical data, including computer software documentation, or computer software to be delivered with other than unlimited rights. Notification and identification is not required for restrictions based solely on copyright.

(c) Applicants submitted in response to this solicitation shall identify, to the extent known at the time an offer is submitted to the Government, the technical data or computer software that the Applicant, its subcontractors or suppliers, or potential subcontractors or suppliers, assert should be furnished to the Government with restrictions on use, release, or disclosure.

(d) The Applicant's assertions, including the assertions of its subcontractors or suppliers or potential subcontractors or suppliers shall be submitted as an attachment to its offer in the following format, dated and signed by an official authorized to contractually

obligate the Applicant:

Identification and Assertion of Restrictions on the Government's Use, Release, or Disclosure of Technical Data or Computer Software.

The Applicant asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

Technical Data, Computer Software to be Furnished With Restrictions* (LIST)*****	Basis for Assertion** (LIST)	Asserted Rights Category*** (LIST)	Name of Person Asserting Restrictions**** (LIST)

*For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, component, or process. For computer software or computer software documentation identify the software or documentation.

**Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

***Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).

****Corporation, individual, or other person, as appropriate.

*****Enter "none" when all data or software will be submitted without restrictions.

Date _____

Printed Name and Title _____

Signature _____

(End of identification and assertion)

(e) An applicant's failure to submit, complete, or sign the notification and identification required by paragraph (d) of this provision with its offer may render the offer ineligible for award.

(f) If the Applicant is awarded a grant or cooperative agreement, the assertions identified in paragraph (d) of this provision shall be listed in an attachment to that agreement. Upon request by the Grants/Agreements Officer, the Applicant shall provide sufficient information to enable the Grants/Agreements Officer to evaluate any listed assertion.

32 CFR Part 26 – Drug-Free Workplace

§26.200 (Recipients Other Than Individuals)

As a condition of receiving a DoD Component award, the recipient agrees that—

(a) First, you must make a good faith effort, on a continuing basis, to maintain a drug-free workplace. You must agree to do so as a condition for receiving any award covered by this part. The specific measures that you must take in this regard are described in more detail in subsequent sections of this subpart. Briefly, those measures are to—

(1) Publish a drug-free workplace statement and establish a drug-free awareness program for your employees (see §§26.205 through 26.220); and

(2) Take actions concerning employees who are convicted of violating drug statutes in the workplace (see §26.225).

(b) Second, you must identify all known workplaces under your Federal awards (see §26.230).

Place of Performance (Street address, city, county, State, zip code)

Check ☐ if there are workplaces on file that are not identified here.

§26.300 (Recipients Who Are Individuals)

As a condition of receiving a DoD Component award, the recipient agrees that--

(a) He or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity related to the award; and

(b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any award activity, he or she will report the conviction:

(1) In writing.

(2) Within 10 calendar days of the conviction.

(3) To the DoD Component awarding official or other designee for each award that you currently have, unless §26.301 or the award document designates a central point for the receipt of the notices. When notice is made to a central point, it must include the identification number(s) of each affected award.

31 USC 1352 – Byrd Anti-Lobbying Amendment

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) None of the funds appropriated by any Act may be expended by the Recipient of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal action described in paragraph (2) of this subsection.

(2) The prohibition in paragraph (1) of this subsection applies with respect to the following Federal actions:

(A) The awarding of any Federal contract.

(B) The making of any Federal grant.

(C) The making of any Federal loan.

(D) The entering into of any cooperative agreement.

(E) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(3) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Sections 8114 and 8113 of Division C and sections 514 and 515 of Division E of the Consolidated and Further Continuing Appropriations Act, 2013, (Pub. L. 113-6)

(a) In accordance with sections 8114 and 8113 of Division C and sections 514 and 515 of Division E of the Consolidated and Further Continuing Appropriations Act, 2013, (Pub. L. 113-6), none of the funds made available by that Act for DoD (including Military Construction funds) may

be used to enter into an agreement with any entity that--

(1) Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless the agency has considered suspension or debarment of the corporation and made a determination that this further action is not necessary to protect the interests of the Government; or

(2) Was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless the agency has considered suspension or debarment of the corporation and made a determination that this action is not necessary to protect the interests of the Government.

(b) The prospective participant represents that--

(1) It is ☐ is not ☐ an entity that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability,

(2) It is ☐ is not ☐ an entity that was convicted of a felony criminal violation under a Federal law within the preceding 24 months.

**Section 743 of Division E of the Consolidated and Further Continuing Resolution
Appropriations Act, 2015 (Pub. L. 113-235)**

**REPRESENTATION REGARDING THE PROHIBITION ON USING FUNDS UNDER
GRANTS AND COOPERATIVE AGREEMENTS WITH ENTITIES THAT REQUIRE CERTAIN
INTERNAL CONFIDENTIALITY AGREEMENTS (ASD(RE) POLICY MEMO) (JUN 2015)**

By submission of its proposal or application, the applicant represents that it does not require any of its 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 those employees, contractors, or subrecipients 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. Note that: (1) the basis for this representation is a prohibition in section 743 of the Financial Services and General Government Appropriations Act, 2015 (Division E of the Consolidated and Further Continuing Appropriations Act, 2015, Pub. L. 113-235) and any successor provision of law on making funds available through grants and cooperative agreements to entities with certain internal confidentiality agreements or statements; and (2) section 743 states that it 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.

As an authorized representative, I hereby make the above certifications on behalf of the applicant.

(Signature)

Date

Name of Authorized Official

Applicant's **Taxpayer Identification Number (TIN)**: _____

Applicant's **Data Universal Numbering System (DUNS) Number**: _____

Applicant's applicable **Commercial and Government Entity (CAGE) Code**: _____



BUDGET PROPOSAL INSTRUCTIONS

Assistance Instruments

**DET 8 AFRL/RVK
3550 ABERDEEN AVE SE
KIRTLAND AFB, NM 87117**

1. GENERAL INSTRUCTIONS:

- A. Provide complete responses to the attached Contractor Information document for the **Recipient and each Subrecipient**. If preferred by the offeror, the responses to the information requested may be provided on a similar form or listed on the first page of the budget proposal. (Attachment 1)
- B. Indicate whether Government approval of respective accounting, estimating, and purchasing systems have been obtained. If so, provide evidence of such approval.
- C. Round all dollar amounts to the nearest dollar. Round all labor rates to the nearest penny.
- D. Furnish Tables 1 thru 4 (sample tables are at paragraph 3 below), or in the contractor's format containing the information outlined in these instructions, for the entire performance period (supported by rationale required by paragraph 2) in hard copy and on CD as IBM PC compatible, Microsoft Excel, to include all cell formulas. Include a separate Cost Element Summary by Offeror Fiscal Year (OFY), for each contract line item (CLIN), for the basic and each option or task order as proposed. (For purposes of these instructions, CLIN refers to contract line items that are required to be priced separately.)
- E. **Provide all budget summaries by OFY.**

2. PROPOSED COST ELEMENTS:

The detail required for each major cost element is described below. Address all cost elements applicable to the proposed effort and provide a narrative to support the basis of estimate. Explain the basis of estimate **for each cost element** to include the basis for proposed rates. As applicable, provide the following information for each cost element. If a portion of the required information is not applicable for a particular cost element, so state.

A. DIRECT COSTS:**(1) DIRECT LABOR:**

- (a) As part of Table 1, list the proposed base, rates, and calculated amounts for each direct labor category by OFY, by CLIN. If separately priced CLINs apply, also include a roll-up to Total Program Summary.
- (b) As part of the basis of estimate narrative, provide rationale for proposed hours and labor mix. Identify staffing requirements by each position title and brief description of duties. Explain how the proposed labor hour skill mix has been derived.
- (c) Provide the base labor rates for each category. If composite or blended rates are used, provide the calculations used in deriving the composite rates. Identify the source of the proposed rates. If applicable, identify the proposed escalation factors applied to future estimates and rationale for the proposed factors. Submit source data for proposed direct labor rates. If evidence of a negotiation agreement, or recently audited direct labor are not available for submission, submit the following source data listed in order of preference, current payroll data, or signed employee agreements, or salary survey, etc. to support proposed direct labor.
- (d) If salaries vice hourly rates are proposed, please list the annual salary of each position, percentage of time and number of months devoted to the project. (e.g., Program Director: \$30,000/year x 25% x 8.5 months; calculation: $\$30,000/12 = \$2,500 \times 25\% \times 8.5 \text{ months} = \$5,312.$) The same level of detail required in paragraph 2A(1)(c) above still applies.

(2) SUBCONTRACTS/INTER-ORGANIZATIONAL TRANSFERS (IOTs):

NOTE: Highly recommend the recipient provide these budget proposal instructions to all subrecipients. Fully disclosed Subrecipient/IOT proposals are required for ALL subrecipients (including Tables 1 thru 4), and are due by the closing date identified in this solicitation.

It is especially important that adequate data on subrecipients be provided. Rates are particularly important. Note that the absence of adequate data on subrecipients is a frequent source of a recipient's inadequate proposal and avoidable delay in contract award.

- (a) As part of Table 1, list each subrecipient/IOT cost separately by OFY by CLIN.
- (b) Provide a list of anticipated subrecipients/IOTs using Table 2.
- (c) Explain the services to be provided by the subrecipient.
- (d) OMB Circulars A-110 and A-102 as implemented by DoDGARs establish procurement standards for covered recipients. The standards include requirements to compete procurements whenever practical, conduct a cost analysis, and award to the most advantageous offer, cost, quality and other factors considered. Provide evidence of compliance with the referenced Circulars.

(3) CONSULTANTS:

- (a) Consultants hired to assist with the program, which do not receive benefits, should be included under other direct costs. If the recipient proposes the use of consultants, provide the following FOR EACH NAMED CONSULTANT:
 - (1) The specific project or area in which such services are to be used.
 - (2) Identification of all cost elements included in the consultant's costs. (i.e.: number of hours, the consultant's rate per hour, plus a detailed explanation of any costs that would be charged over and above labor costs)

- (3) A signed consulting agreement between the recipient and the consultant
- (b) In those cases where a consultant IS NOT NAMED but the recipient realizes a need will exist, support the proposed daily rate by supplying a basis of estimate.

(4) MATERIALS/ EQUIPMENT/ SUPPLIES:

- (a) As part of Table 1, list material/equipment costs by OFY by CLIN. Using Table 4, provide a consolidated priced summary of individual quantities and the basis for pricing by OFY, by CLIN. As part of the basis of estimate narrative, provide information regarding the rationale/methodology used to derive the proposed estimate.
- (b) Include raw materials, parts, components, assemblies, etc., to be produced or performed by others. Equipment is defined as having a per unit cost of \$5,000 and a service life of more than one year. If the item meets these criteria then all federal procurement policies and procedures must be followed. If an item does not meet these criteria it is considered a supply. List items separately using unit costs (and the percentage of each unit cost being charged to the Government) for photocopying, postage, telephone/fax, printing, and office supplies (for example, Telephone: \$50/month x 50% = \$25/month x 12 months).
- (c) For those assistance awards where the procurement standards of the DoDGARs apply, state whether the cognizant field administration office (CFAO) has reviewed the intended recipient's procurement system. If the CFAO has found the recipient to be in compliance with the DoDGARs requirements, provide evidence of such finding, otherwise if the procurement meets any of the conditions at DoDGARs 32.44(e) and 34.31(b), provide copies of supporting documentation (Purchase Orders, Vendor Quotes, Invoice Prices, Catalog Prices, or Historical Information) to substantiate a MINIMUM of 70% of the proposed material/equipment/supply costs.

Specifically, provide supporting documentation for the highest unit prices.

(5) OTHER DIRECT COSTS (ODCs):

As part of Table 1, list ODC costs by OFY by CLIN. The inclusion of each should be justified in the budget narrative. A-133 audit costs can be included if they are not part of the indirect pool and only the portion of the cost associated with this program can be included.

(a) ODCs - Travel

- i. Identify the following information for each trip: location of origin and destination; number of travelers; duration; airfare cost; rental car cost; per diem (meals and lodging) cost; any other costs.
- ii. As part of Table 1, list travel costs by OFY by CLIN. Using Table 3, separately identify costs for travel. Note that Table 3 is a summary format and may be expanded to include more detailed travel rate information and calculations.

(b) ODCs - Other

- i. Using Table 4, identify and provide a detailed description of any other direct costs that do not fit into the ODC categories above, including the basis for determining those costs (e.g., vendor quotes, catalog pricing data, company estimating procedures, etc.).
- ii. Provide an explanation/rationale for all other proposed ODCs.
- (c) For those assistance awards where the procurement standards of the DoDGARs apply, state whether the cognizant field administration office (CFAO) has reviewed the intended recipient's procurement system. If the CFAO has found the recipient to be in compliance with the DoDGARs requirements, provide evidence of such finding, otherwise if the procurement meets any of the conditions at DoDGARs 32.44(e) and 34.31(b), provide copies of supporting documentation for proposed ODCs.

B. INDIRECT COSTS

- (1) As part of Table 1, list the proposed base, rate/factor and calculated amount for each indirect cost by OFY, by CLIN.
- (2) As part of the basis of estimate narrative, identify all indirect cost rates/factors and the applicable allocation bases.
- (3) Identify the basis of proposed rates (e.g., rate agreement, actual rates and effective date, etc.). Submit source data for all proposed indirect rates. If evidence of negotiated or approved rates, or recently audited indirect rates are not available for submission, submit the following source data in order of preference, budgetary data to include details of the indirect rate cost pools, or supporting historical trend data.
- (4) If recipient is subject to full CAS coverage and is proposing FCCOM, submit a properly executed DD Form 1861. Provide the basis for proposed percentage of land buildings and equipment.
- (6) **Note: Normally, neither G&A nor COM can be applied to costs that are included in the recipient's Independent Research and Development account.**

C. NEW MEXICO GROSS RECEIPTS TAX (NMGR):

- (1) It is anticipated that NMGR costs will **NOT** apply to this effort. Effective 1 January 2016, the New Mexico Taxation and Revenue Department (TRD) has implemented a Gross Receipts Tax deduction for R&D efforts (reference Gross Receipts and Compensating Tax Act 3.2.218 NMAC page 385, <http://www.tax.newmexico.gov/recent-regulation-changes.aspx>).
- (2) For assistance in determining the extent to which NMGR may or may not apply and applicable rates, contact the New Mexico Taxation and Revenue Department, 5301 Central Ave., NE, PO Box 8485, Albuquerque, NM 87198, (505) 841-6200, <http://www.tax.newmexico.gov/Businesses/gross-receipts.aspx>.

3. SAMPLE COST PROPOSAL TABLES (Revise to comply with established accounting practices.):

- A. Table 1 (Sample): Cost Element Summary. If applicable, list each Subrecipient and IOT separately.

SAMPLE Table 1 - COST ELEMENT SUMMARY								
COST ELEMENT	OFY YYYY (DD MMM YYYY - DD MMM YYYY)			OFY YYYY (DD MMM YYYY - DD MMM YYYY)			TOTAL PROPOSED	
	BASE	RATE	AMOUNT	BASE	RATE	AMOUNT	BASE	AMOUNT
Direct Labor								
Labor Category #1	1,200.0	\$ 20.00	\$ 24,000	1,200.0	\$ 20.00	\$ 24,000	2,400.0	\$ 48,000
Labor Category #2	2,400.0	\$ 30.00	\$ 72,000	2,400.0	\$ 30.00	\$ 72,000	4,800.0	\$ 144,000
Labor Category #3	600.0	\$ 40.00	\$ 24,000	600.0	\$ 40.00	\$ 24,000	1,200.0	\$ 48,000
TOTAL DIRECT LABOR	4,200.0		\$ 120,000	4,200.0		\$ 120,000	8,400.0	\$ 240,000
Labor Overhead	\$ 120,000	50.00%	\$ 60,000	\$ 120,000	50.00%	\$ 60,000	\$ 240,000	\$ 120,000
Fringe	\$ 180,000	20.00%	\$ 36,000	\$ 180,000	20.00%	\$ 36,000	\$ 360,000	\$ 72,000
SUBTOTAL LABOR			\$ 216,000			\$ 216,000		\$ 432,000
Subrecipients – IOTs			\$ 200,000			\$ 200,000		\$ 400,000
Material			\$ 100,000			\$ 100,000		\$ 200,000
Material Overhead	\$ 100,000	3.00%	\$ 3,000	\$ 100,000	3.00%	\$ 3,000	\$ 200,000	\$ 6,000
ODC - Travel			\$ 8,000			\$ 8,000		\$ 16,000
ODC - Consultants	600.0	\$ 100.00	\$ 60,000	600.0	\$ 100.00	\$ 60,000	1,200.0	\$ 120,000
ODC - Other			\$ 3,000			\$ 3,000		\$ 6,000
SUBTOTAL			\$ 590,000			\$ 590,000		\$ 1,180,000
F&A or G&A	\$ 590,000	10.00%	\$ 59,000	\$ 590,000	10.00%	\$ 59,000	\$ 1,180,000	\$ 118,000
SUBTOTAL			\$ 649,000			\$ 649,000		\$ 1,298,000
FCCOM - Overhead	\$ 120,000	1.00%	\$ 1,200	\$ 120,000	1.00%	\$ 1,200	\$ 240,000	\$ 2,400
FCCOM - G&A	\$ 590,000	0.10%	\$ 590	\$ 590,000	0.10%	\$ 590	\$ 1,180,000	\$ 1,180
TOTAL COST			\$ 650,790			\$ 650,790		\$ 1,301,580
NMGR - Kirtland AFB	\$ 606,048	6.2500%	\$ 37,878	\$ 606,048	6.2500%	\$ 37,878	\$ 1,212,210	\$ 75,756
NMGR - Albuquerque	\$ 41,815	7.0000%	\$ 2,927	\$ 41,815	7.0000%	\$ 2,927	\$ 83,630	\$ 5,854
NMGR - Out-of-State	\$ 2,927	5.1250%	\$ 150	\$ 2,927	5.1250%	\$ 150	\$ 5,854	\$ 300
TOTAL COST + NMGR			\$ 691,745			\$ 691,745		\$ 1,383,490

B. TABLE 2 (Sample): SUBRECIPIENTS/IOTs & CONSULTANTS

SAMPLE Table 2 - PRICE SUMMARY for SUBRECIPIENTS / IOTs & CONSULTANTS						
NAME	TASKS	TYPE	QUOTED PRICE	RECIPIENT'S EVALUATED COST	DIFFERENCE	% of WORK
TOTALS			\$ -	\$ -		0.00%

C. TABLE 3 (Sample): TRAVEL

SAMPLE Table 3 - Travel											
OFY	From	To	Purpose	No. Trips	No. Tvlrs	No. Days	Per Diem	Lodging	Rental Car	Airfare	Total
YYY1											
YYY1											
YYY1 Subtotal:											\$ -
YYY2											
YYY2											
YYY2 Subtotal:											\$ -
TOTAL TRAVEL:											\$ -

D. Table 4 (Sample): MATERIALS/EQUIPMENT/SUPPLIES & ODCs (other than Travel & Consultants)

SAMPLE Table 4 - MATERIALS/EQUIPMENT/SUPPLIES & OTHER ODCs								
MATERIALS								
Item	OFY	Description	Qty	Unit Price	Total Price	Vendor/Source	Basis of Estimate	Totals
1	YYY1							
3	YYY1							
4	YYY1							
5	YYY1							
6	YYY1							
7	YYY1							
OFY YYY1 Subtotal:								\$ -
8	YYY2							
9	YYY2							
10	YYY2							
11	YYY2							
12	YYY2							
OFY YYY2 Subtotal:								\$ -
Total MATERIALS Proposed:								\$ -
ODCs								
Item	OFY	Description	Qty	Unit Price	Total Price	Vendor/Source	Basis of Estimate	Totals
1	YYY1							
3	YYY1							
4	YYY1							
5	YYY1							
6	YYY1							
7	YYY1							
OFY YYY1 Subtotal:								\$ -
8	YYY2							
9	YYY2							
10	YYY2							
11	YYY2							
12	YYY2							
OFY YYY2 Subtotal:								\$ -
Total ODCs Proposed:								\$ -

RECIPIENT INFORMATION

1. SOLICITATION / CONTRACT / MODIFICATION NO. /BAA NUMBER		2. RECIPIENT'S FISCAL YEAR (OFY):	
3. NAME AND ADDRESS OF RECIPIENT (Include ZIP Code)	4A. NAME AND TITLE OF RECIPIENT'S POINT OF CONTACT		4B. TELEPHONE NO.
	5A. ASSISTANCE INSTRUMENT TYPE:		5B. TYPE OF ACTION:
	6. DUNS NUMBER		7. CAGE CODE
	8A. PERFORMANCE START DATE:		8B. PERFORMANCE END DATE
9. PLACE OF PERFORMANCE	10. PROPOSED COST (A + B = C)		
	A. TOTAL COST \$	B. NMGR \$	C. TOTAL COST + NMGR \$
11. PROVIDE NAME, ADDRESS, AND TELEPHONE NUMBER FOR THE FOLLOWING			
11A. DEFENSE CONTRACT AUDIT AGENCY (DCAA) or Govt Contract Audit Ofc		11B. DEFENSE CONTRACT MANAGEMENT AGENCY (DCMA) or Cognizant Field Admin Ofc	
12. WILL YOU REQUIRE THE USE OF ANY GOVERNMENT PROPERTY THE PERFORMANCE OF THIS WORK? (If "yes," identify in proposal) ☐ YES ☐ NO		13. IS THIS PROPOSAL CONSISTENT WITH YOUR ESTABLISHED ESTIMATING AND ACCOUNTING PRACTICES AND PROCEDURES AND FAR PART 31, COST PRINCIPLES? (If "No," explain in proposal) ☐ YES ☐ NO	
14. COST ACCOUNTING STANDARDS BOARD (CASB) DATA (Public Law 91-379 as amended and FAR PART 30)			
A. WILL THIS CONTRACT ACTION BE SUBJECT TO CASB (If "No," explain in proposal) ☐ YES ☐ NO		B. HAVE YOU SUBMITTED A CASB DISCLOSURE STATEMENT REGULATIONS? (CASB DB-1 OR 2)? (If "Yes," specify in proposal the office to which submitted, and if determined to be accurate.) ☐ YES ☐ NO	
C. HAVE YOU BEEN NOTIFIED THAT YOU ARE OR MAY BE IN NON-COMPLIANCE WITH YOUR DISCLOSURE STATEMENT OR COST ACCOUNTING STANDARDS? (If "Yes," explain in proposal) ☐ YES ☐ NO		D. IS ANY ASPECT OF THIS PROPOSAL INCONSISTENT WITH YOUR DISCLOSED PRACTICES OR APPLICABLE COST ACCOUNTING STANDARDS? (If "Yes," explain in proposal) ☐ YES ☐ NO	
This proposal complies with the cost proposal instructions. If support data are required, this proposal reflects our estimates and/or actual costs as of this date. By submitting this proposal, we grant the Grant/Agreements Officer or authorized representative(s) the right to examine, at any time before award, those records, which include books, documents, accounting procedures and practices, and other data, regardless of type and form or whether such supporting information is specifically referenced or included in the proposal as the basis for pricing, that will permit an adequate evaluation of the proposed price.			
15. NAME AND TITLE		16. NAME OF RECIPIENT	
17. SIGNATURE			18. DATE OF SUBMISSION

NOTE: Text can be added to an Adobe Acrobat Pro PDF file by using Tools, Content, Add or Edit Text Box.