

[Type here]

Program	Number:	

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT

exten Mass Lexir of Te and _ "PAF and I	er the authority of the Federal Technology Transfer Act of 1986 as amended and codified at 15 U.S.C. §3710a and as ided to Directors of Federally Funded Research and Development Centers (FFRDC) under 10 U.S.C. §4026, achusetts Institute of Technology Lincoln Laboratory (hereinafter referred to as "LL"), located at 244 Wood Street, agton, Massachusetts, a Department of Defense (DoD), FFRDC operated and managed by the Massachusetts Institute echnology (hereinafter "MIT") and performing research under contract between the United States Air Force and MIT		
(knov	EREAS, LL has performed pre-competitive research and development with respect to		
as "P	EREAS, PARTNER has performed research and development with respect to (known hereafter artner Technology"), and desires to provide resources and funding exclusively to further research and develop such er Technology;		
Unde Direc	EREAS, through an Agreement of Sponsorship Between the DoD and MIT, entered into on 19 March 2015, the er Secretary of Defense (Acquisition, Technology and Logistics) (USD (AT&L)) has delegated authority to LL's er to enter into CRADAs on behalf of the DoD and LL cooperation with PARTNER shall develop and transfer the mology in the furtherance of the public interest.		
NOV	V, THEREFORE, in consideration of the mutual covenants and agreements contained herein, Parties agree:		
1.	DEFINITIONS		
	sed in this CRADA, the following terms have the following meanings and such meanings should be applicable to the singular and plural forms of the terms:		
1.1	"Background Invention" means an Invention first conceived or reduced to practice of either or both parties developed (a) before the Effective Date, or (b) thereafter independently of the SOW, hereinafter defined.		
1.2	"Government" refers to the Government of the United States of America and to any agency or agencies thereof.		
1.3	"Invention" means any invention or discovery which is or may be patentable or otherwise protected under Title 35 of the United States Code or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. § 2321 et seq). See 35 U.S.C. § 201(d) and 15 U.S.C. § 3703(7).		
1.4	"Confirmatory License or Government Rights License" means a nonexclusive, nontransferable, irrevocable, paid- up license to practice or have practiced for or on behalf of the Unites States the subject invention throughout the world. (15 USC § 3710a(b)(1)).		
1.5	"LL Property" shall mean property belonging to MIT or property belonging to the U.S. Government located at LL, for which LL has property management responsibility.		
1.6	"Made" when used in relation to any Invention means the conception or first actual reduction to practice.		
1.7	"Proprietary Information" means information which, at the time of disclosure to the Receiving Party, is designated in writing as "proprietary" by the Disclosing Party, unless such information: (a) was in the Receiving		

Party's possession before receipt from the Disclosing Party as shown by the Receiving Party's prior written records; (b) is already available or becomes available to the public through no fault of the Receiving Party; (c) is received by the Receiving Party from a third party who rightfully possesses the information, has the lawful right to disclose such information, and the information does not contain restrictive markings; (d) is disclosed by the Disclosing Party to a third party without a duty of confidentiality on the third party; (e) is independently developed by or for the Receiving Party independent of the information received from the Disclosing Party; or (f) is disclosed by the Receiving Party with the Disclosing Party's prior written approval.

2. STATEMENT OF WORK

- 2.1 The Parties shall use good faith efforts to perform the research activities in accordance with the description in the Statement of Work ("SOW") set forth in Attachment 1 hereto (the "Research"); however, neither Party makes any warranties or representations regarding completion of the Research or the achievement of any particular results. Any modification(s) to the SOW shall be by mutual agreement between the Parties and shall be incorporated herein by executed written amendment to this CRADA.
- 2.2 The utilization of LL's personnel, resources, facilities, equipment, skills, know how, computer software and information will be consistent with its own policies, missions and requirements.
- 2.3 Under no circumstances shall LL be required to perform services beyond the statement of work and funding provided by PARTNER.

3. PERIOD OF PERFORMANCE

3.1 The period of performance of this CRADA shall be effective upon receipt by LL of initial funding increment ("Effective Date") and will terminate on the last day of the [insert POP end], unless extended in writing and agreed upon by the Parties.

4. FINANCIAL OBLIGATION

- 4.1 PARTNER will, prior to the commencement of work, fund LL to cover the costs of its work under this project, as set forth in Attachment 2. LL will not commence work until the initial funding increment, as set forth in Attachment 2, has been received by LL. The minimum increment is 60 days with a "net 10" payment. In addition, the total costs will include a 2% administrative surcharge.
- 4.2 It is expressly understood and agreed that payments by PARTNER under this Agreement shall in no event exceed the maximum amount indicated in Attachment 2, except upon formal modification of this Agreement signed by both Parties. LL will stop performance under this CRADA if the funds provided by PARTNER for performance by LL are not provided as specified in Attachment 2 of this Agreement.
- 4.3 Notwithstanding any other provision or term of this Agreement, LL will return surplus CRADA program funds to the addressee listed in Article 16 within a reasonable period of time after the end of the Agreement.

5. FACILITIES, EQUIPMENT, AND PROPERTY

- 5.1 Each Party will abide by the safety and security regulations and directives of the facility where the work in support of the CRADA is being performed. Each Party may request copies of all applicable safety and security regulations and directives from the other Party.
- 5.2 Each Party will retain title to all tangible property to which it had title prior to the Effective Date of this CRADA or to which it acquired or acquires title, by purchase or by fabrication, outside of the scope of this CRADA. Property acquired during the term of the CRADA shall be owned by MIT, unless otherwise stipulated in this Agreement.
- 5.3 LL reserves the right to audit the use of LL Property made available to the PARTNER in the performance of this Agreement. PARTNER may repair or modify LL Property at PARTNER's expense after obtaining the written approval of

- LL. Any repair or modification of the property shall not affect the title of the Government. The Party that has received property or equipment from the other party under this Agreement assumes the risk of, and shall be responsible for, any loss of such property or equipment upon its return, or failure to return when due, to the Party providing the property or equipment. All property and equipment provided to the receiving Party, unless otherwise specified in the Statement of Work, shall be returned in the same condition in which it was received, reasonable wear and tear excepted.
- 5.4 Each Party is responsible for the removal or disposal of any toxic or hazardous materials/wastes in its custody during the course of this CRADA. Each Party must obtain all necessary permits and licenses as required by local, state, Federal law and regulation, and will affect such removal/disposal in a lawful and environmentally responsible manner.

6. USE OF NAME, ENDORSEMENTS, AND PUBLICATIONS

- 6.1 USE OF NAMES. PARTNER and its affiliates [or Affiliate] shall not use the name "Massachusetts Institute of Technology" or "Lincoln Laboratory" or any variation, adaptation, or abbreviation thereof, or the name of any of MIT's trustees, officers, faculty members, students, employees, or agents, or any trademark owned by MIT, in any promotional material or other public announcement or disclosure without the prior written consent of MIT's Institute Office of Communications (<u>ioc-useofname@mit.edu</u>), which consent MIT may withhold in its sole discretion. The foregoing notwithstanding, PARTNER may make factual statements about the existence of this Agreement without prior approval, including the amount of the Funding and description of the Research being conducted hereunder, solely to comply with governmental disclosure obligations, or otherwise required by law.
- 6.2 The Parties recognize MIT's first right to publish the results of the Research, and MIT will be free to publish such results after providing PARTNER with a thirty (30) day period in which to review each publication to identify patentable subject matter and any inadvertent disclosure of PARTNER's Proprietary Information. If necessary to permit the preparation and filing of U.S. patent applications, which may be requested by PARTNER, the Principal Investigator may agree to an additional period not to exceed an additional thirty (30) days [can be up to 60, no more than 90 total].

7. PARTNER INTELLECTUAL PROPERTY.

Title to any invention conceived or first reduced to practice in performance of the Research solely by PARTNER personnel (each a "PARTNER Invention") shall remain with PARTNER. PARTNER will grant, and agrees to grant, the Government a paid-up, royalty-free, irrevocable, non-exclusive license to practice, or have practiced for or on behalf of Government, any PARTNER Invention. The PARTNER will promptly provide a Confirmatory License upon request by LL for any PARTNER Invention.

Title to and the copyright in any copyrightable material, including computer software, first produced or composed in the performance of the Research solely by PARTNER personnel without use of LL administered facilities or resources ("PARTNER Copyright") shall remain with PARTNER. PARTNER Copyright may be used internally by MIT for purposes of performing the Research, and any other current or future MIT research. PARTNER hereby grants a non-exclusive, irrevocable, paid-up, worldwide license granted to the U.S. Government to use, duplicate or disclose the PARTNER Copyright, in whole or in part and in any manner, for Government purposes only and to have or permit others to do so for Government purposes only. Government purposes include competitive procurement, but do not include the right to have or permit others to use the copyrighted works for commercial purposes. Prior to distribution, PARTNER will clearly mark all PARTNER Copyright subject to a Government purpose license with the words "Government Purpose Rights".

8. **JOINT INTELLECTUAL PROPERTY.**

8.1 JOINT INVENTIONS. The Parties shall have joint title to any invention conceived or first reduced to practice jointly by at least one MIT employee and at least one PARTNER personnel in the performance of the Research ("Joint Invention"). Each Party shall promptly notify the other Party of any Joint Invention; in the case of LL, such notification shall be provided to PARTNER after an invention disclosure is received by MIT's Technology Licensing Office ("TLO"). MIT shall have the first right to file a patent application on a Joint Invention in the names of both Parties, unless otherwise agreed. All expenses incurred in obtaining and maintaining any patent or patent application claiming such Joint Invention shall be equally shared except that, if one Party declines to share in such expenses, the other Party may take

over the prosecution and maintenance thereof, at its own expense, provided that title to the patent or patent application claiming any such Joint Invention remains in the names of both Parties.

8.1.1 JOINTLY DEVELOPED COPYRIGHTABLE MATERIALS. Copyrightable materials, including computer software, produced, composed or authored in performance of the Research jointly by at least one MIT employee and one PARTNER personnel shall be jointly owned by both Parties (each, a "Joint Copyright"). Each Party shall have the independent, unrestricted right to non-exclusively license such Joint Copyright as they deem appropriate, without any obligation of accounting to the other Party.

8.2 OPTION FOR COMMERCIAL LICENSE TO JOINT INVENTION.

- 8.2.1 Option Rights. Each Party shall have the independent, unrestricted right to license to third parties any such Joint Invention without accounting to the other Party, except that with respect to each such Joint Invention, MIT hereby grants PARTNER an option to negotiate in good faith with MIT for an exclusive, royalty-bearing, worldwide license under MIT's interest in the Joint Invention to develop, make, have made, offer for sale, sell, have sold, export and import products and services in a mutually defined field of use on terms that are commercially reasonable to the industry and shall include, among other terms, the reservation of rights for MIT and other not-for-profit institutions to practice the Joint Invention for educational and research purposes, and other entities for the purpose of performing under a research agreement then in effect with MIT, and grant the U.S. Government a non-exclusive, nontransferable, irrevocable, paid-up license to practice such Joint Invention or have the Joint Invention practiced throughout the world by or on behalf of the Government for research or other Government purposes.
- 8.2.2 Exercise and Negotiation Period. If PARTNER would like to exercise an option for such Joint Invention, it must provide MIT with written notice of such decision within six (6) months following the date of MIT's notice of disclosure to PARTNER of the relevant Joint Invention (the "Joint Invention Option Period"). If PARTNER exercises an option within the Joint Invention Option Period, it shall enter into a three (3) month negotiation period (the "Negotiation Period") which may be extended by mutual agreement of the Parties. If PARTNER exercises its option, it shall be responsible for reimbursing MIT for costs of patent prosecution activities incurred by MIT during the Joint Invention Option Period (and Negotiation Period, if any).
- 8.2.3 Expiration and Termination of Joint Invention Option Rights. With respect to all Joint Inventions for which MIT has granted PARTNER option rights under this Section 8.2 if PARTNER (a) does not affirmatively exercise its Option during the Joint Invention Option Period; or (b) the Parties fail to reach agreement on terms and conditions of a license agreement within the Negotiation Period, then PARTNER's option rights under this Section 8.2 with respect to such Joint Invention shall expire.

9. MIT INTELLECTUAL PROPERTY.

- 9.1 MIT INVENTIONS. MIT shall have sole title to any Invention conceived or first reduced to practice solely by MIT employees in performance of the CRADA (each a "MIT Invention"). PARTNER shall be notified of any MIT Invention promptly after an invention disclosure is received by MIT's TLO. MIT may (a) file a patent application at its own discretion, or (b) shall do so at PARTNER's request and expense.
- 9.2 Reserved
- 9.3 COMMERCIAL LICENSE TO PARTNER. MIT will grant to PARTNER an option to obtain an exclusive or nonexclusive license to MIT Inventions on the same terms and conditions, and consistent with the timeframes set forth in Section 8.2.

9.4 Background Intellectual Property. NOTE: Only use this Article if Applicable. "*Background Invention*" means any Background Invention owned and controlled by MIT, and is necessary to perform the Research. As of the Effective Date of this CRADA, MIT TLO has identified the following Background Invention(s):

MIT Case #		

[If applicable: MIT hereby grants PARTNER a non-exclusive, royalty-free, nontransferable right to use the Background Invention solely to the extent necessary to perform the Research.] The Background Invention(s) are available for licensing. MIT will, to the extent that it is legally able to do so, offer a non-exclusive license to the available Background Inventions to PARTNER upon mutually agreeable terms and at reasonable royalties or other compensation, solely as necessary for PARTNER to practice any commercial license obtained by PARTNER.

10. **PROPRIETARY INFORMATION**

The Parties agree to protect the other's Proprietary Information disclosed under this Agreement by using at least the same degree of care, but no less than reasonable care, to prevent the unauthorized use, disclosure, or publication of the Proprietary Information as the receiving party uses to protect its own proprietary information of like nature. PARTNER hereby grants LL, to the extent necessary for LL performance under this CRADA, a right to use, duplicate and disclose such proprietary information in confidence.

11. INDEPENDENT CONTRACTORS

- 11.1 PARTNER and LL are independent contractors and are not agents of each other, joint venturers, partners, or joint parties to a formal business organization of any kind. Neither party is authorized or empowered to act on behalf of the other with regard to any contract, warranty, or representation as to any matter. Neither party will be bound by the acts or conduct of the other. Each party will maintain sole and exclusive control over its own personnel and operations.
- 11.2 PARTNER agrees that (a) it will not submit a government proposal that commits LL to the performance of any resulting contract; and (b) it will not use LL's services in the performance of any government contract. The technology conveyed under this CRADA, consistent with this CRADA, is available for any other use by the PARTNER in the performance of any contract. If either party should become aware that performance under this CRADA would violate these stipulations, either party may terminate this CRADA in accordance with the procedures provided in Article.

12. PARTNER REPRESENTATIONS AND WARRANTIES

- 12.1 PARTNER hereby represents and warrants as follows:
- 12.1.1 PARTNER, as of the Effective Date of this CRADA, is a duly organized, validly existing, and in good standing under the laws of the State of ______. PARTNER is neither foreign owned nor a subsidiary of a foreign owned entity.
- 12.1.2 The PARTNER hereby represents and warrants that it is not suspended, proposed for debarment or debarred from eligibility for federal procurements (i.e., contracts, grants, cooperative agreement). The PARTNER will provide timely notice (seven days or less) to LL should this status or representation change.

13. LIABILITY; DISCLAIMER OF WARRANTIES.

13.1 Neither Party will be liable for the consequences of any force majeure that (1) is beyond reasonable control; (2) is not caused by the fault or negligence of such Party; (3) causes such Party to be unable to perform its obligations under this CRADA; and (4) cannot be reasonably overcome by the exercise of due diligence. In the event of the occurrence of a force majeure, the Party unable to perform will promptly notify the other Party. The Parties will suspend performance only for such period of time as is necessary to overcome the result(s) of the force majeure and will use its best efforts to resume performance as quickly as possible.

- 13.2 Subject to Article 5 herein, LL will not otherwise bear any responsibility for any property of PARTNER consumed, damaged or destroyed in performance of this CRADA. PARTNER agrees that it will release the U.S. Government from any like responsibility.
- 13.3 LL MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE RESEARCH OR ANY INTELLECTUAL PROPERTY RIGHTS AND HEREBY DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES FOR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF MIT, LL, OR THIRD PARTIES, VALIDITY, ENFORCEABILITY, AND SCOPE OF ANY INTELLECTUAL PROPERTY RIGHTS OR CLAIMS, WHETHER ISSUED OR PENDING, AND THE ABSENCE OF LATENT OR OTHER DEFECTS, WHETHER OR NOT DISCOVERABLE. IN NO EVENT SHALL EITHER PARTY, ITS TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES, STUDENTS, AND AFFILIATES, BE LIABLE FOR INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING ECONOMIC DAMAGES OR LOST PROFITS, REGARDLESS OF WHETHER THE PARTY WAS ADVISED, HAD OTHER REASON TO KNOW OR IN FACT KNEW OF THE POSSIBILITY OF THE FOREGOING.
- 13.4 PARTNER hereby indemnifies and holds harmless the U.S. Government and MIT for any loss, claims, damage, or liability of any kind involving an employee of PARTNER, arising in connection with this CRADA, except to the extent that such loss, claim, damage, or liability arises solely from the negligence of LL or its employees. PARTNER shall be solely responsible for the payment of all claims for the loss of property, personal injury, or death, or otherwise arising out of any negligent act or omission of its employees in connection with the performance of work under this CRADA.
- 13.5 PARTNER holds the U. S. Government and MIT harmless and will indemnify them both for all liabilities, demands, damages, expenses, and losses arising out of the use by PARTNER, or any party acting on its behalf or under its authorization, of LL's research and technical developments or out of any use, sale, or other disposition by PARTNER, or others acting on its behalf or with its authorization, of products made by the use of LL's technical developments. The Government has no statutory authority to indemnify the PARTNER. This provision shall survive CRADA termination.

14. TERMINATION AND DISPUTES

- 14.1 A Party may terminate this Agreement with thirty (30) days written notice of termination to the other Party. In the event that either Party shall be in breach, violation or default of any of its obligations under this Agreement and shall fail to remedy such default within thirty (30) days after receipt of written notice thereof, the party not in default (reserving cumulatively all other remedies and rights under this Agreement and at law and in equity) shall have the option of terminating this Agreement upon written notice thereof. Termination of this Agreement shall not affect the rights and obligations of the parties accrued prior to the effective date of termination of this Agreement. In the event of expiration or termination of this CRADA, those sections that by their nature are intended by the Parties to survive shall survive and continue in effect to the extent necessary to protect the rights of the Parties.
- 14.2 All disputes arising out of, or related to, this CRADA shall be resolved in accordance with this Article. The Parties recognize that disputes or claims arising under this CRADA are best resolved by the Parties directly involved ("Working Level"). In the event the matter cannot be resolved at the Working Level, the matter will be decided by LL. In the event the matter cannot be resolved within a reasonable period of time, the matter will be forwarded to a mutually agreed upon neutral third party.

15. MISCELLANEOUS

- 15.1 <u>No Benefits</u>. No member of, or delegate to, the United States Congress or resident commissioner shall be admitted to any share or part of this CRADA, nor to any benefit that may arise therefrom. This Article shall not be construed to extend to this CRADA if PARTNER is a corporation and PARTNER enters into this CRADA for its general benefit.
- 15.2 <u>Governing Law.</u> The construction, validity, performance, and effect of this CRADA for all purposes shall be governed by the laws and regulations of the United States and applicable Commonwealth of Massachusetts laws that do not conflict with these Federal laws and regulations.

- Entire Agreement. This CRADA constitutes the entire agreement between the parties concerning the subject 15.3 matter hereof and supersedes any prior understanding or written or oral agreement relative to said matter.
- Waivers and Severability. None of the provisions of this CRADA shall be considered waived by any party hereto unless such waiver is given in writing to all other parties. The failure of any party to insist upon strict performance of any of the terms and conditions hereof, or failure or delay to exercise any rights provided herein or by law, shall not be deemed a waiver of any rights of any party hereto. The illegality or invalidity of any provisions of this CRADA shall not impair, affect, or invalidate the other provisions of this CRADA.
- Amendments. If either party desires a modification in this CRADA, the parties shall, upon reasonable notice of 15.5 the proposed modification by the party desiring the change, confer in good faith to determine the desirability of such modification. Such modification shall not be effective until a written amendment is signed by all the parties hereto by their representatives duly authorized to execute such amendment.
- 15.6 Assignment. Neither this CRADA nor any rights or obligations of any party hereunder shall be assigned or otherwise transferred by either party without the prior written consent of the other party.
- 15.7 Export Controls. Information and/or products developed pursuant to this CRADA may contain information for which export is restricted by the Arms Control Act (22 USC 2571 et seq.) or the Export Administration Act (50 USC 2401 et seq.). Nothing in this CRADA shall be construed to permit any disclosure in violation of those restrictions.

16. **NOTICES**

	d formal notices under this CRADA, including Mail, or by electronic mail with a non-automa	copyright, invention and patent correspondence, by prepaid, certificated confirmation receipt by receiving party.	
	LL:	PARTNER:	
	[Name]	[Name]	
	[Address]	[Address]	
	Phone:	Phone:	
	Email:	Email:	
17.	SIGNATURES		
	WITNESS WHEREOF, the Parties have caused esentatives as follows:	d this CRADA to be executed in duplicate by their duly authorized	
	For LL:	For PARTNER:	
	By: Justin J. Brooke / Melissa G. Choi	By:	
	Title: Assistant Director	Title:	
	Date:	Date:	

GOVERNMENT REVIEWING

OFFICIAL:

For MIT:

By: Michael P. Corcoran

Title: Assistant Director, Grant & Contract

Administration

Date:

By: Eric D. Evans

Title: Director, MIT Lincoln Laboratory

Date:

ATTACHMENT 1 - JOINT STATEMENT OF WORK

[HOLD FOR ACTUAL]

ATTACHMENT 2 – Funding Instructions and Spend Plan

[RESERVED for actual Spend Plan]

All such payments shall be made payable to "MIT LINCOLN LABORATORY" and shall be used for performance of this CRADA. Funding provided will be utilized solely for the performance of the CRADA Statement of Work tasks. Payments should either be mailed to the following address:

Financial Services Department MIT Lincoln Laboratory 244 Wood Street, Room FR1-216-11 Lexington, MA 02421-6426

or wired to the following address:

Massachusetts Institute of Technology Bank of America 100 Federal Street Boston, MA 02110 Account No.: 0094 2777 7602

ACH Wire No.: 0110-0013-8.

All wire payments shall reference the Invoice Number on each transaction using the following Bank prescribed format: RMR*IV*20000xxxx***00000.00. (The underlined portions refer to the Invoice Number and Invoice dollar amount.)