

**PHASE I FUNDING
GRANT AGREEMENT BETWEEN
INDIANA ECONOMIC DEVELOPMENT CORPORATION
AND
AERODYN ENGINEERING, INC.
(ITEM NO. 366)**

This Grant Agreement ("Agreement") is made and entered into by and between the Indiana Economic Development Corporation (the "IEDC"), on behalf of the Indiana Twenty-First Century Research and Technology Fund (the "Fund"), and AERODYN ENGINEERING, INC. ("Grantee"), and shall be dated as of the date of execution by the last signatory hereto (the "Effective Date"). The parties hereto agree as follows:

1. Purpose of Agreement; Scope of Work.

The purpose of this Agreement is to enable the IEDC to make a grant (the "Grant") from the Fund of the lesser of (i) SEVENTY-FIVE THOUSAND AND 00/100 DOLLARS (\$75,000.00) or (ii) the amount of matching funds received by the Grantee for the federal SBIR Phase I Option/Enhancement for the Project (as defined below), if applicable (the "Maximum Grant Amount"), subject to the terms and conditions of this Agreement and Grantee's compliance with its obligations described herein. Grantee will use its best efforts to perform, coordinate and supervise to completion the experiments, studies and commercialization plans (the "Project") as described in the research proposal contained in its grant application package submitted to the Defense Logistics Agency prior to the Effective Date (the "Proposal") and its abstract attached hereto as Schedule A, all of which are incorporated herein by reference. The Grant shall be used exclusively in accordance with the provisions of this Agreement and Indiana Code § 5-28-16 *et. seq.* (establishing the Fund) and any rules adopted thereunder, for the implementation of the Project or the provision of the services in conformance with the budget submitted with the Proposal and for no other purpose. Modification of the Project description or the Proposal will only be allowed in accordance with Section 11 of this Agreement or by a written amendment to this Agreement executed by both parties.

2. Term.

The term of this Agreement (the "Term") is the Effective Date through August 31, 2014, unless sooner terminated as described in this Agreement (the "Expiration Date"). The Fund will honor allowable expenses incurred for the Project beginning on April 25, 2011; no Grant funds disbursed to Grantee pursuant to this Agreement shall be used for expenses incurred by Grantee prior to such date.

3. Reporting Requirements.

3.1 Grantee shall submit to the IEDC copies of all materials that are required to be submitted by Grantee to a federal agency as part of Grantee's federal Phase I SBIR grant as set forth at Schedule B, which is attached hereto and incorporated herein by reference. Grantee shall file periodic financial and technical reports in the form required by the IEDC on the dates set forth at Schedule B, which is attached hereto and incorporated herein by reference. Grantee shall also promptly submit any other financial or technical information reasonably requested from time to time by the IEDC to ensure compliance with the terms and conditions of this Agreement.

3.2 Grantee shall submit, in the manner requested by the IEDC, a copy of the IEDC's

annual certification form (as available on the Fund website, as such form may be amended from time to time by the IEDC) on the first and second anniversaries of the Expiration Date to confirm Grantee's compliance with Section 7 of this Agreement and to collect information regarding the success of the Project.

3.3 Failure of Grantee or its Principal (as defined in Section 11.2 below) to comply with the reporting requirements set out in Sections 3.1 and 3.2 shall be grounds for the suspension and/or termination of this Agreement and the reimbursement of Grant funds as set forth in Sections 23 and 7 hereof, respectively.

3.4 To the extent permitted by applicable law, the Fund and its representatives agree to hold in confidence any information disclosed to them by Grantee under this Agreement which is either identified in writing as confidential or not generally known by or available to the public. For the purpose of this Agreement, "hold in confidence" means that the IEDC will protect the information in accordance with the most recent confidentiality policy adopted by the Board of Directors of the IEDC.

4. Disbursements.

In accordance with the terms of this Agreement, the Grant shall be disbursed as follows: (i) SEVENTY-FIVE THOUSAND AND 00/100 DOLLARS (\$75,000.00) promptly after the execution of this Agreement and (ii) if applicable, the remainder, as a dollar-for-dollar match up to the Maximum Grant Amount, upon receipt by the IEDC of evidence satisfactory to the IEDC that Grantee has received its federal SBIR Phase I Option/Enhancement for the Project; provided, however, that in no event shall the disbursements made under this Agreement exceed the lesser of (a) the total amount of the federal Phase I SBIR grant and the Option/Enhancement, if any, or (b) the Maximum Grant Amount. All payments hereunder are subject to the IEDC's determination that Grantee's performance to date conforms to the Project, as approved and described at Schedule A, notwithstanding any other provision of this Agreement to the contrary. Accordingly, no payments will be made without the prior written approval of the IEDC. As required by Indiana Code § 4-13-2-14.8 and notwithstanding any other law, rule or custom, a person or company which has a contract with the IEDC or the State of Indiana or submits invoices to the IEDC or the State of Indiana for payment shall authorize in writing the direct deposit by electronic funds transfer of all payments by the State of Indiana to the person or company. The written authorization must designate a financial institution and an account number to which all payments are to be credited.

5. Continuing Disbursements.

5.1 Unless otherwise specified, each payment will be funded at the level set forth in Section 4, provided that (i) Grantee is in compliance with the provisions of this Agreement, including, but not limited to, all federal agency reports, the Interim Report, the Final Report and any other technical, financial and metrics reporting requirements, (ii) Grantee has provided the IEDC, and the IEDC has approved, all of the evidentiary materials required by Schedule A, and (iii) Grantee has obtained and presented written proof of a federal Phase I SBIR grant prior to entering into this Agreement. Grantee acknowledges that any delay in Grantee's satisfaction of these requirements may delay a subsequent payment by at least fifteen (15) days.

5.2 Grant payments may be held by Grantee in the short term in interest bearing accounts until needed to pay the expenses of the Project. Disbursements from the Fund are intended solely for use in paying expenses generated by the Project as outlined in the budget included at Schedule A. Grantee shall not use Fund disbursements as investments to generate significant amounts of interest. If a disbursement from the Fund is not required, Grantee shall notify the Fund in writing, and specify

when the next disbursement should be made.

5.3 After the completion of the Project, any unexpended funds drawn by Grantee must be returned promptly to the Fund. Furthermore, no Grant funds may be expended after the Expiration Date, and any drawn funds unexpended as of the Expiration Date must be returned promptly to the Fund. The Fund shall not be obligated to disburse any remaining funds to Grantee after the Expiration Date and Grantee acknowledges that any delay in Grantee's satisfaction of the requirements of this Agreement may result in the loss of payment. The Fund may deobligate any Grant funds returned to, or otherwise on deposit with, the Fund after the Expiration Date.

6. Grantee Responsibilities.

6.1 Grantee has full responsibility for the conduct of the Project supported under this Grant and for adherence to the conditions set forth in this Agreement. Although Grantee is encouraged to seek the advice and opinion of the IEDC on special problems that may arise, such advice does not diminish Grantee's responsibility for making sound scientific and administrative judgments and should not, and does not, imply that the responsibility for operating decisions ever transfers to either the IEDC or the Fund. It is further understood that Grantee shall make such operating decisions based upon its own investigations, knowledge and experience and not in reliance upon the advice or opinion of the IEDC. Grantee is responsible during the Term of this Agreement for notifying the IEDC and the Fund of any significant problems relating to the scientific, administrative or financial aspects of the Project.

6.2 By acceptance of this Grant, Grantee agrees to comply with each of the requirements set forth in this Agreement and to the prudent management of all expenditures and actions affecting the Grant. Documentation for expenditures or actions affecting the Grant must reflect appropriate organizational reviews or approvals in accordance with Grantee's internal governance requirements and procedures, which reviews and approvals should be made in advance of the action. Grantee's internal organizational reviews are intended to help assure that expenditures are allowable, necessary and reasonable for the conduct of the Project, and that the proposed action:

- (i) is consistent with Grant terms and conditions as set forth herein;
- (ii) represents effective utilization of resources;
- (iii) does not constitute a significant Project change; and
- (iv) is consistent with Grantee's organizational policies and procedures.

7. Reimbursement.

Grantee shall reimburse the IEDC the full amount of the Grant upon the occurrence of any of the following events:

- (i) Grantee moves the Project (or any business resulting from the Project) outside the State of Indiana during the term of the Agreement or within two (2) years following the end date specified in Section 2, or
- (ii) Grantee makes a misstatement of material fact on either the application, the written proof of the federal Phase I SBIR grant, the Project description contained in Schedule A, or any of the reports required by Section 3 and Schedule B of this Agreement, or
- (iii) An event of default occurs under Grantee's federal Phase I SBIR grant agreement, or
- (iv) Grantee defaults under the terms and conditions of this Agreement and a non-

mutual termination results under Section 23.

8. Equipment.

8.1 Title to Equipment. Unless otherwise specified herein, title to equipment purchased or fabricated with Grant funds shall be purchased for use in the Project, shall vest in Grantee upon acquisition, and shall be free of all claims, liens, or encumbrances of the Fund or the IEDC. Grantee shall be responsible for all insurance and liability related to such equipment. Such equipment is subject to the conditions established in Section 8.2 below.

8.2 Conditions for Acquisition and Use of Equipment. Grantee will assure that each purchase of equipment is:

- (i) necessary for the research or activity supported by the Grant;
- (ii) made because such equipment is not otherwise reasonably available and accessible on commercially reasonable terms without purchase; and
- (iii) acquired in the ordinary course of Grantee's business.

9. Publications.

9.1 The IEDC will not restrict Grantee, the Principal or associated investigators involved in the Project from presenting or publishing results of the Project, provided that all such presentations and publications shall be made in a commercially reasonable, prudent manner so as to protect any intellectual property or other confidential or proprietary information of Grantee.

9.2 During the Term, Grantee will use best efforts to acknowledge Fund support in any publication (including World Wide Web pages) of any material based on or developed under the Project, and during all news media interviews, including popular media such as radio, television and news magazines.

9.3 During the Term, Grantee will use best efforts to assure that a copy of every publication of which Grantee is aware and which is based on or developed under this Grant, clearly labeled with the Proposal number and other appropriate identifying information, is sent to the IEDC promptly after publication.

10. Intellectual Property and Commercialization.

10.1 Neither the Fund nor the IEDC will make any claim to, or take any interest in, any inventions, improvements, information, data, know-how, findings, recommendations, proposals, trade secrets, patents, by whatever name described and by whatever form therein, secured, developed, written or produced (collectively "Intellectual Property") by Grantee and collaborators in connection with the Project.

10.2 Grantee recognizes that the publication of results and the commercialization of innovative technology developed with Grant funds received from the Fund are of fundamental importance to the IEDC and the State of Indiana. Grantee agrees to diligently pursue the commercialization of any patented technology and/or copyrightable works produced under this Agreement.

10.3 Grantee recognizes that the Fund's primary objectives are to support proposals for economic development to (i) increase the success of Indiana institutions of higher education, Indiana

businesses and Indiana nonprofit corporations and organizations in securing research funding, (ii) transfer research and technologies into marketable products, (iii) assist with diversifying Indiana's economy by focusing investment in targeted industry clusters requiring high skill, high wage workers, and (iv) encourage an environment of innovation and cooperation among universities and businesses to promote research activity. Grantee agrees that all activities supported with Fund dollars will further efforts toward accomplishing one or more of these objectives.

10.4 The Fund is interested in measuring the long-term outcomes of Grantee and the Project. To gather this information, the Fund may periodically request information from Grantee after Grantee's reporting requirements have terminated. The information regarding success of Grantee and the Project will not be as detailed as required in the reporting requirements. Grantee shall cooperate in tracking Fund outcomes and use commercially reasonable best efforts in providing requested information.

10.5 Grantee expressly represents and warrants to the IEDC and the Fund that it is statutorily eligible to receive these monies and it expressly agrees to repay all monies paid to it under this Agreement, should a legal determination of its ineligibility be made by any court of competent jurisdiction.

11. Prior Approval Requirements.

Grantee is required to obtain prior written approval from the IEDC whenever there are significant changes in the Project or in its direction or budget as stipulated as follows:

11.1 Change in the objectives or scope of the Project. The IEDC intends to provide flexibility to Grantee in the pursuit of its technology development/commercialization goals. However, a proposed change in the phenomenon or phenomena under study or the objectives of the Project stated in the Proposal or agreed modifications thereto should be communicated in writing to the IEDC by Grantee along with a request for modification of the Project. Changes in the allocation of up to 25% of the annual budget can be made at the discretion of Grantee, if no change in overall Project objectives is involved. Approval of such changes by the IEDC, if granted, will be memorialized by a written amendment to this Agreement.

11.2 Absences or Change of the Principal. The Project will be performed under the direction of Tom Lawrence (the "Principal"). If the Principal plans to or becomes aware that he will: (1) devote substantially less effort to the work than anticipated in the approved Proposal (defined as a reduction of 25% or more in time); (2) sever his connection with Grantee; or (3) be absent for a continuous period of three (3) months or more, or otherwise relinquish active direction of the Project, he shall, in writing, advise the IEDC of such circumstance. In the event of any of the above occurring, the parties will attempt to identify and secure a mutually acceptable substitute. In the event a mutually acceptable substitute is not found, the Agreement may be suspended or terminated in accordance with Section 23.

12. Confidentiality of State Information.

Grantee understands and agrees that data, materials and other information disclosed to Grantee by the IEDC, the Fund or any of their representatives may contain confidential and protected data, therefore, Grantee promises and assures that data, material and other information gathered, based upon or disclosed to Grantee for the purpose of this Agreement and which are marked as confidential will not be disclosed to others or discussed with other parties without the prior written consent of the IEDC.

13. Access to Records, Audit, and Site Visits.

13.1 Grantee and its permitted subgrantees or subcontractors, if any, shall maintain all books, documents, papers, accounting records, and other evidence pertaining to costs incurred under this Agreement ("Records") for inspection by the IEDC and the Fund or by any of their respective authorized representatives, and reasonable requests for copies thereof shall be furnished to the IEDC and the Fund if requested. Grantee and its permitted subgrantees, if any, shall make all Records available at their respective offices at all reasonable times during the Term of this Agreement and for three (3) years from the date of the final disbursement under the Grant or until a state or federal audit has been completed and all audit exceptions cleared, whichever is earlier.

13.2 If the IEDC determines that fraud or other criminal misconduct has occurred with disbursements of Grant funds made to Grantee from the IEDC, the IEDC will consider Grantee in default of a material provision of this Agreement and will terminate this Agreement in accordance with Section 23. Grantee will be responsible for reimbursement to the Fund of the full amount required under Section 7 at the time of the termination.

13.3 The IEDC and its authorized representatives shall have the right, at all reasonable times, to make site visits to: (1) review Project accomplishments and to confer with the Principal and permitted subgrantees, if any; (2) to audit Records and management control systems; and (3) to provide such technical assistance as may be required. If any site visit is made on the premises of Grantee or any subgrantee or contractor under the Grant, Grantee shall provide and shall require its subgrantees and contractors to provide all reasonable facilities and assistance for the safety and convenience of the Fund or its representatives in the performance of their duties. All site visits and evaluations shall be performed in such a manner that will not unduly delay work on the Project. Grantee will be given at least one (1) week prior notice before any site visit.

14. Compliance with Laws.

14.1 Grantee agrees to comply with all applicable federal, state and local laws, rules, regulations and ordinances, and all provisions required thereby to be included herein are hereby incorporated by reference. The enactment of any state or federal statute or the promulgation of regulations thereunder after execution of this Agreement shall be reviewed by the IEDC and Grantee to determine whether the provisions of this Agreement require formal modification.

14.2 Grantee and its agents shall abide by all ethical requirements that apply to persons who have a business relationship with the State of Indiana, as set forth in Indiana Code § 4-2-6 *et seq.*, the regulations promulgated thereunder, and Executive Order 04-08, dated April 27, 2004. If Grantee is not familiar with these ethical requirements, Grantee should refer any questions to the Indiana State Ethics Commission, or visit the Indiana State Ethics Commission website at <http://www.in.gov/ethics/>. If Grantee and/or its agents violate any applicable ethical standards, the IEDC may, in its sole discretion, terminate this Agreement immediately upon notice to Grantee. In addition, Grantee may be subject to penalties under Indiana Code § 4-2-6-12.

14.3 Grantee certifies by entering into this Agreement that neither it nor any of its principals is presently in arrears in payment of its taxes, permit fees or other statutory, regulatory or judicially required payments or other liabilities to the IEDC or the State of Indiana. Further, Grantee agrees that any payments in arrears and currently due to the IEDC or the State of Indiana may be withheld from payments due to Grantee. Additionally, payment of the Grant may be suspended by the IEDC until Grantee is current in the foregoing payments to the IEDC or the State of Indiana, whichever the case may

be, and has submitted proof of such payments to the IEDC:

14.4 Grantee warrants that it has no current or outstanding criminal, civil, or enforcement actions initiated by the State of Indiana pending, and agrees that it will immediately notify the IEDC of any such actions.

14.5 If a valid dispute exists as to Grantee's liability or guilt in any action initiated by the IEDC or the State of Indiana or its agencies, and the IEDC decides, as a result, to delay, withhold, or deny payments under the Grant, Grantee may request that it be allowed to continue to receive such payments without delay. Grantee must submit, in writing, a request for review to the Indiana Department of Administration (IDOA) following the procedures for disputes outlined herein. A determination by IDOA shall be binding on the parties.

14.6 Any payments that may be delayed, withheld, denied, or applied under this Section shall not be subject to penalty or interest under Indiana Code § 5-17-5.

14.7 Grantee warrants that Grantee and its subcontractors, if any, shall obtain and maintain all required permits, licenses, and approvals, as well as comply with all health, safety, and environmental statutes, rules, or regulations in the performance of the Project. Failure to do so is a material breach of this Agreement and grounds for immediate suspension or termination of the Grant under Section 23.

14.8 Grantee hereby affirms that it is properly registered with, and owes no outstanding reports to, the Indiana Secretary of State and that it is in good standing with the Indiana Department of Revenue. Grantee also affirms that (A) there are no outstanding enforcement actions against it by the IEDC or agencies of the State of Indiana, and (B) there are no significant workforce issues pending against Grantee. The below named signatory(ies) hereby warrant that they are authorized to make such affirmations to the IEDC.

14.9 Grantee agrees that the State of Indiana may confirm, at any time, that no liabilities exist to the IEDC or the State of Indiana, and, if such liabilities are discovered, that the IEDC or the State of Indiana may bar Grantee from contracting with the IEDC or the State of Indiana in the future, cancel existing contracts, withhold payments to setoff such obligations, and withhold further payments or purchases until the entity is current in its payments on its liabilities to the IEDC or the State of Indiana and has submitted proof of such payment to the IEDC or the State of Indiana.

15. Compliance with Telephone Solicitations Act.

As required by Indiana Code § 5-22-3-7:

15.1 Grantee and any principals of Grantee certify that:

- (i) Grantee, except for de minimis and nonsystematic violations, has not violated the terms of:
 - (A) Indiana Code § 24-4.7 [Telephone Solicitation of Consumers],
 - (B) Indiana Code § 24-5-12 [Telephone Solicitations], or
 - (C) Indiana Code § 24-5-14 [Regulation of Automatic Dialing Machines]

in the previous three hundred sixty-five (365) days, even if Indiana Code

§ 24-4.7 is preempted by federal law; and

- (ii) Grantee will not violate the terms of Indiana Code § 24-4.7 for the duration of this Agreement, even if Indiana Code § 24-4.7 is preempted by federal law.

15.2 Grantee and any principals of Grantee certify that no affiliate or principal of Grantee or any agent acting on behalf of Grantee or on behalf of an affiliate or principal of Grantee:

- (i) except for de minimis and nonsystematic violations, has violated the terms of Indiana Code § 24-4.7 in the previous three hundred sixty-five (365) days, even if Indiana Code § 24-4.7 is preempted by federal law; and
- (ii) will violate the terms of Indiana Code § 24-4.7 for the duration of the Agreement, even if Indiana Code § 24-4.7 is preempted by federal law.

16. Conflict of Interest.

16.1 As used in this Section, (a) "immediate family" means the spouse and the unemancipated children of an individual; (b) "Interested Party" means (i) the individual executing this Agreement; (ii) an individual who combined with his immediate family has an equity interest of one percent (1%) or more of Grantee, if Grantee is not an individual; or (iii) any member of the immediate family of an individual specified under clause (i) or (ii); and (c) "Commission" means the Indiana State Ethics Commission.

16.2 The IEDC may cancel this Agreement without recourse to Grantee if any Interested Party is (i) an employee of the State of Indiana or the IEDC, (ii) a state officer or special state appointee of the IEDC under Indiana Code § 4-2-6, or (iii) a public servant of the IEDC under Indiana Code § 35-44-1.

16.3 The IEDC will not exercise its right of cancellation under Section 16.2 above if Grantee gives the IEDC an opinion by the Commission indicating that the existence of this Agreement and the employment, election or appointment by the State of Indiana or the IEDC of the Interested Party does not violate any statute or code relating to the ethical conduct of employees, officers and special state appointees of the IEDC. The IEDC may take action, including cancellation of this Agreement, consistent with an opinion of the Commission obtained under this Section 16.

16.4 Grantee has an affirmative obligation under this Agreement to disclose to the IEDC when an Interested Party is or becomes an employee, officer or special state appointee of the State of Indiana or the IEDC. The obligation under this Section 16.4 extends only to those facts that Grantee knows or reasonably could know.

17. Maintaining a Drug Free Workplace.

17.1 Grantee hereby covenants and agrees to make a good faith effort to provide and maintain a drug free workplace during the Term of this Agreement, and that it will give written notice to the IEDC within ten (10) days after receiving actual notice that Grantee or an employee of Grantee in the State of Indiana has been convicted of a criminal drug violation occurring in Grantee's workplace.

17.2 It is further expressly agreed that a false certification, a violation of the certification or the failure of Grantee to comply, in good faith, with the terms of this Section shall constitute a material breach of this Agreement, and shall entitle the IEDC to impose, or otherwise may result in, sanctions including but not limited to the suspension of Grant payments, the termination of this Agreement in accordance with Section 23, and/or debarment of grant opportunities with the Fund, the IEDC and the State of Indiana for up to three (3) years.

17.3 In addition to the provisions of the above paragraphs, if the total Grant amount set forth in this Agreement is in excess of \$25,000.00, Grantee hereby further agrees that this Agreement is expressly subject to the terms, conditions and representations of the following certification:

This certification is required by Executive Order No. 90-5, April 12, 1990, issued by the Governor of Indiana. Pursuant to its delegated authority, the Indiana Department of Administration is requiring the inclusion of this certification in all contracts with and grants from the State of Indiana in excess of \$25,000.00. No grant of a contract shall be made, and no contract, purchase order or agreement, the total amount of which exceeds \$25,000.00, shall be valid, unless and until this certification has been fully executed by Grantee and made a part of the contract or agreement as part of the agreement documents.

Grantee certifies and agrees that it will provide a drug-free workplace by:

- A. Publishing and providing to all of its employees a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in Grantee's workplace and specifying the actions that will be taken against employees for violations of such prohibition; and
- B. Establishing a drug-free awareness program to inform its employees of (1) the dangers of drug abuse in the workplace; (2) Grantee's policy of maintaining a drug-free workplace; (3) any available drug counseling, rehabilitation, and employee assistance programs; and (4) the penalties that may be imposed upon an employee for drug abuse violations occurring in the workplace.
- C. Notifying all employees in the statement required by clause (A) above that as a condition of continued employment the employee will (1) abide by the terms of the statement, and (2) notify Grantee of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;
- D. Notifying the Fund, in writing, within ten (10) days after receiving notice from an employee under clause (C)(2) above, or otherwise receiving actual notice of such conviction;
- E. Within thirty (30) days after receiving notice under clause (C)(2) above of a conviction, imposing the following sanctions or remedial measures on any employee

who is convicted of drug abuse violations occurring in the workplace: (1) take appropriate personnel action against the employee, up to and including termination; or (2) require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement, or other appropriate agency; and

- F. Making a good faith effort to maintain a drug-free workplace through the implementation of clauses (A) through (E) above.

18. Funding Cancellation.

When the Director of the Indiana State Budget Agency makes a written determination that funds are not appropriated or otherwise available to support continuation of performance of this Grant, the Grant shall be canceled immediately. A determination by the Budget Director that funds are not appropriated or otherwise available to support continuation of performance shall be final and conclusive. The IEDC shall notify Grantee of any such cancellation.

19. Non-Discrimination.

Pursuant to Indiana Code § 22-9-1-10 and in keeping with the purposes of the Civil Rights Act of 1964, the Age Discrimination in Employment Act, and the Americans with Disabilities Act, Grantee and its subgrantees and subcontractors, if any, shall not discriminate against any employee or applicant for employment to be employed in connection with the performance of this Agreement, with respect to hiring, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of his or her race, color, religion, sex, age, disability, national origin or ancestry or status as a veteran. A breach of this covenant shall be regarded as a material breach of this Agreement. Acceptance of this Agreement also signifies compliance with the applicable federal and state laws and regulations prohibiting the aforementioned discrimination in the provision of services.

20. Notices and Other Communications.

Whenever any notice, statement, or other communication shall be sent to the Fund or Grantee it shall be sent to the following addresses unless otherwise specifically advised in writing by such party:

IEDC: Indiana Twenty-First Century Research and Technology Fund
C/O Indiana Economic Development Corporation
Attn: General Counsel
One North Capitol Avenue, Suite 700
Indianapolis, IN 46204-2043

Grantee: Aerodyn Engineering, Inc.
Attn: Tom Lawrence
1919 S Girls School, Rd
Indianapolis, IN 46241

Notices, statements or other communications shall be deemed delivered when received. As required by Indiana Code § 4-13-2-14.8, payments to Grantee shall be made via electronic funds transfer in accordance with the instructions filed by Grantee with the Indiana State Auditor's Office, unless an exception to such requirement is approved by the IEDC and the State of Indiana. Payments shall be deemed delivered upon being transmitted pursuant to the written instructions of Grantee.

21. Order of Precedence.

Any inconsistency or ambiguity in this Agreement shall be resolved by giving precedence in the following order: (1) this Agreement, (2) the Schedules attached to this Agreement, (3) the Indiana Economic Development Corporation guidelines and (4) 21st Century Research and Technology Fund guidelines.

22. Extension of Agreement.

Grantee may request in writing that the Expiration Date of this Agreement be extended; provided, however, that the amount of Grant funds disbursed under this Agreement shall not exceed the Maximum Grant Amount. Prior to the Expiration Date, the IEDC, through a duly authorized representative, may approve or deny such request in its sole and unreviewable discretion; provided, however, that the authorized representative of the IEDC may not extend the Expiration Date of this Agreement beyond **March 31, 2015**, without the approval of the Indiana State Budget Director. Documentation approving an extension shall be attached hereto as an addendum. If the Expiration Date is extended, the Expiration Date shall be extended for all purposes. A denial of an extension request shall in no way affect the survival of certain terms of this Agreement as provided for in Section 23.1.

23. Suspensions, Termination and Survival of Terms.

23.1. Unless otherwise terminated or modified as expressly permitted hereunder, this Agreement will remain in force during the Term stated in Section 2. Notwithstanding anything contained herein to the contrary, provisions of this Agreement which by their nature contemplate rights and obligations of the parties to be enjoyed or performed after the expiration or termination of this Agreement, shall survive until their purposes are fulfilled.

23.2. In the event that Grantee defaults, fails to perform or breaches any provision of this Agreement, the IEDC may suspend or terminate this Agreement upon providing thirty (30) days' prior written notice to Grantee, if Grantee fails to cure such breach or nonperformance (if curable) within such period; provided, however, that notwithstanding the foregoing, the IEDC may immediately suspend and withhold, without notice to Grantee, any and all payments to Grantee hereunder until such breach or nonperformance is cured. As previously stated in Section 4 and notwithstanding the foregoing, all payments under this Agreement are subject to the IEDC's determination that Grantee's performance to date conforms to the Project as approved, irrespective of whether the aforementioned thirty (30) day notice requirement has been met.

23.3 This Agreement may be suspended or terminated by the mutual written agreement of the IEDC and Grantee, if it is determined by both parties that the Project should be suspended or terminated. If the IEDC and Grantee are unable to reach an agreement on the status of the Project, the IEDC reserves the right to suspend or terminate the Agreement.

23.4 No costs incurred during a suspension period or after the effective date of a termination will be allowable, except those costs which, in the opinion of the IEDC, Grantee could not reasonably avoid or eliminate, or which were otherwise authorized by the suspension or termination notice, provided such costs would otherwise be allowable under the terms of the Grant.

23.5 Within thirty (30) days of termination of this Agreement under this Section 23, Grantee shall furnish a summary of progress under the Grant and an itemized accounting of costs incurred

prior to such termination date pursuant to 23.4 above. Final allowable costs under a termination settlement shall be in accordance with the terms of the Grant, including this Section 23, giving due consideration to the progress of the Project under the Grant.

23.6 Failure to complete the Project and expend the Grant funds and/or other State of Indiana, IEDC, local and/or private funds, if applicable, in accordance with this Agreement may be considered a material breach, and shall entitle the IEDC and the State of Indiana to impose sanctions against Grantee including, but not limited to, suspension of all Grant payments and/or suspension of Grantee's participation in State of Indiana or IEDC programs until such time as all material breaches are cured to the IEDC's satisfaction. Sanctions may also include repayment of all State of Indiana or IEDC funds expended, whether or not they are held or were expended for this Project or accounted for in the budget included at Schedule A.

23.7 Any payments that may be delayed, withheld, denied, or applied under this Section, Section 3, Section 4 or Section 5 shall not be subject to penalty or interest under Indiana Code § 5-17-5.

24. Assignment.

This Agreement binds Grantee's successors and assignees to all terms and conditions of this Agreement. Grantee shall not assign, subgrant or subcontract the whole or any part of the Project unless it was specifically identified in the original Proposal or has been approved in writing by the IEDC.

25. Hold Harmless.

Grantee shall indemnify, defend, and hold harmless the IEDC, the Fund, the State of Indiana and their respective agents, officers, employees and representatives from all claims and suits for loss or damage to property, including the loss of use thereof, and injuries to or death of persons, including without limitation any officers, agents, employees and representatives of Grantee or its subgrantees or subcontractors, and from all judgments recovered therefor and for expenses in defending any such claims or suits, including court costs, attorneys' fees, and for any other expenses caused by an act or omission of Grantee and/or its subgrantees, subcontractors, agents, officers or employees in connection with the performance of this Agreement.

26. Debarment and Suspension.

Grantee certifies, by entering into this Agreement, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from entering into this Agreement by any federal agency or department, the IEDC, or any agency or political subdivision of the State of Indiana. The term "principal" for purposes of this Agreement is defined as an officer, director, owner, partner, key employee, or other person with primary management or supervisory responsibilities, or a person who has a critical influence on or substantive control over the operations of Grantee.

27. Penalties; Interest; Attorneys' Fees.

The IEDC will in good faith perform its required obligations hereunder and does not agree to pay any penalties, liquidated damages, interest or attorneys' fees, except as authorized by Indiana law, in part, if applicable, Indiana Code § 5-17-5, Indiana Code § 34-54-8, and Indiana Code § 34-13-1. Notwithstanding the provisions contained in Indiana Code § 5-17-5, the parties hereto stipulate and agree that any liability resulting from any failure of the Fund to make payments as required hereunder shall be

based solely on the amount of funding originating from the IEDC or the State of Indiana and shall not be based on funding from federal or other sources.

28. Authority to Bind Grantee.

Notwithstanding anything in this Agreement to the contrary, the signatory(ies) of Grantee represents that he/she has been duly authorized to execute contracts on behalf of Grantee and has obtained all necessary approvals from the home office of Grantee, if applicable, to make this Agreement fully binding upon Grantee when his/her signature is affixed hereto and is not subject to home office acceptance.

29. Representations Concerning Application.

Grantee represents and warrants that the representations, statements and all other matters contained in the application submitted by Grantee to the IEDC are true and complete in all material respects. It shall be considered a material breach of this Agreement if such representations, statements and other matters were not true and complete at the time the application was made.

30. Miscellaneous.

30.1 The headings in this Agreement are intended solely for convenience or reference and will be given no effect in the construction or interpretation of this Agreement.

30.2 This Agreement, including the Schedules attached hereto, supersedes all prior oral and written proposals and communications, if any, and sets forth the entire agreement of the parties with respect to the subject matter hereof and may not be altered or amended except in writing, signed by an authorized representative of each party hereto (following requisite IEDC approval).

30.3. The construction and enforcement of this Agreement shall be governed by the laws of the State of Indiana, without regard to principles of choice of law, and the venue for any court action shall be the circuit or superior court of Marion County, Indiana or the United States District Court of the Southern District of Indiana and Grantee hereby consents to the personal jurisdiction of said courts.

30.4. No waiver of any default, failure to perform, condition, provision or breach of this Agreement will be deemed to imply or constitute a waiver of any other like default, failure to perform, condition, provision or breach of this Agreement.

30.5. If any paragraph, term, condition or provision of this Agreement will be found, by a court of competent jurisdiction, to be invalid or unenforceable, or if any paragraph, term, condition or provision is found to violate or contravene the laws of the State of Indiana, then the paragraph, term, condition or provision so found will be deemed severed from this Agreement, but all other paragraphs, terms, conditions and provisions will remain in full force and effect.

30.6 The parties to the Agreement, in the performance of this Agreement, will be acting in an individual capacity and not as agents, employees, partners, joint venturers or associates of one another. The employees or agents of one party shall not be deemed or construed to be the employees or agents of any other party for any purposes whatsoever. No party will assume any liability for any injury (including death) to any persons, or any damage to any property arising out of the acts or omissions of the agents, employees or subagents of any other party.

30.7 Grantee shall be responsible for providing all necessary unemployment and

workers' compensation insurance for Grantee's employees.

30.8 Grantee is required to comply with the provisions of 45 CFR Part 46, as such may be amended from time to time, as if this Grant was funded with federal funds and is responsible for the protection of the rights and welfare of any human subjects involved in the research, development and related activities supported by this Grant, and for compliance with any other federal and/or state statutes and regulations pertaining to the use of human subjects in research.

30.9 Grantee is required to comply, as applicable, with the Animal Welfare Act, as amended, 7 U.S.C. 2131-2156, and is responsible for assuring the humane care, handling, and treatment of vertebrate animals held or used for any activities supported by this Grant, and for compliance with any other federal and/or state statutes and regulations pertaining to the use of vertebrate animals in research.

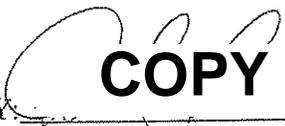
31. Non-Collusion and Acceptance.

The undersigned attest(s) under the penalties for perjury that he or she is the contracting party, or that he or she is the representative, agent, member or officer of the contracting party, that he or she has not, nor has any other member, employee, representative, agent or officer of the firm, company, corporation or partnership represented by him or her, directly or indirectly, to the best of his or her knowledge, entered into or offered to enter into any combination, collusion or agreement to receive or pay, and that he or she has not received or paid, any sum of money or other consideration for the execution of this Agreement other than that which appears upon the face of the Agreement.

[SIGNATURES APPEAR ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates entered below.

AERODYN ENGINEERING, INC.

BY:  **COPY**

PRINTED: David Lawrence

TITLE: President

DATE: 3-1-13

**INDIANA TWENTY-FIRST CENTURY
RESEARCH AND TECHNOLOGY FUND**

**INDIANA ECONOMIC DEVELOPMENT
CORPORATION**

BY: 

Eric Doden
President

SA

DATE: 3/13/2013

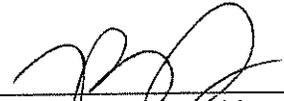
**STATE BUDGET AGENCY CERTIFICATION
PURSUANT TO INDIANA CODE § 5-28-16-2**

BY:  **COPY**

PRINTED: Tom Lawrence

TITLE: Principal Investigator

DATE: 3/1/2013

BY: 
Christopher Atkins, Director
The State Budget Agency

DATE: 3/21/13

Schedule B

Reporting Requirements

Reports	IEDC Reporting Due Date
IEDC Technical/Financial Report #1	08/31/2013
IEDC Technical/Financial Report #2	03/15/2014
IEDC Technical/Financial Final Report	08/31/2014
Annual Certification Form Year 1	08/31/2015
Annual Certification Form Year 2	08/31/2016

Grantee shall also comply with the reporting requirements of the federal agency which awards Grantee a Phase I SBIR grant related to the Project. Within fifteen (15) days following the date materials are required to be filed with such federal agency, Grantee shall be required to submit copies of those materials to the IEDC. If any such materials have already been filed with such federal agency on or prior to the Effective Date hereof, Grantee shall be required to submit copies of such materials simultaneously with its execution of this Agreement.

Schedule A

Company: Aerodyn Engineering, Inc.

Address: 1919 S. Girls School Rd.
Indianapolis, IN 46241

Phone:

Fax:

E-mail:



President:

Principal Investigator:



Involved Partner Institutions: None

SBIR/STTR Proposal Title: Scale up HVD parylene HT deposition process for economic continuous production of magnet wire

Funding Agency: Defense Logistics Agency (DLA) (DoD)

Award Number: SP4701-11-M-A063

Start Date: 4/25/2011

Phase I Total Award: \$99,819.00

Federal Funding Agency Reporting Requirements: (Description and due dates of each)

One page Abstract: 30 days after start

Draft Final Report: 30 days prior to end of contract

Final report: End of contract

Draft SBIR R&D Project Summary: 30 days prior to end of contract

SBIR R&D Project Summary: End of Contract

Summary Abstract describing the Phase I project:

"Without magnet wire, electricity is essentially useless. Around 90% of all electrical energy requires modification using magnet wire to be of any use." The National Electrical Manufacturers Association (NEMA)," [3].

Magnet wire comes in a variety of insulations with temperature capabilities from 105°C for plain enamel to 240°C for polyimide. High temperature (HT) magnet wire is highly desirable in devices where high performance is important such as aircraft generators which are always trying to improve their KVA per pound ratio. It is also very important to applications where high temperatures are encountered such as in down-hole electronics for petroleum and natural gas. So

much so, that the petroleum and gas industry through the Society of Petroleum Engineers has set a 300°C electronics goal. A goal that can never be achieved with 240°C magnet wire.

AEI found the ideal coating for insulating magnet wire, parylene HTTM. The coating is superior to the best magnet wire insulations in every way. It has a conservative operating temperature of 350°C and does not degrade until >450°C. Its dielectric strength is an amazing 5,400 V/mil which is over 20 times that of commercial magnet wire. It forms a micropore-free coating with a thickness of as little as 0.2 mm thickness (0.000008"). Parylene HTTM has never been considered as a coating candidate for magnet wire because it can only be applied via a long retention time vacuum deposition process.

During AEI's phase II SBIR effort for the Army on SBIR W911W6-06-C-0058, "Advanced HSHT Slip Ring for Turboshaft Engines", an innovative vibratory technique was developed and demonstrated to deposit parylene HTTM on batches of long continuous lengths of magnet wire. This resulted in provisional patent # 61289994. Subsequent work developed techniques to convert this process to a high-speed, continuous, reel-to-reel process. These additional concepts are incorporated in patent pending US# 61/289994. This program funds further development of the process from a TRL level of 4 to a TRL level of 7.

Work Plan/Timeline:

Phase I work plan will be devoted to determining if (1) self threading of the wire web is feasible, and (2) improved economical strut design, and 3) feasibility of continuous operation.

4.1 Task – Determine if self threading of wire web is feasible.

- Cam point designs will be designed to guide threading.
- A single layer of cam points will be built.
- Compressive stress on the wire will be determined when wire is fed through cam points under vibration.

4.2 Task – Improved strut design

- Materials will be examined in consideration of their ease fabrication, stiffness, and ability to pyrolyze excess parylene.
- Fabrication process will be examined in accordance with materials considered.
- Strut will be designed based on whether it is self threading or interlocking.

4.3 Task – Design for continuous operation

- A push-pull, tension sensitive, feed and take up reel will be designed.
- Wire will be run through various serpentines of vibrating cam points to ascertain possibility of high speed operation.

Summary Budget:

The Phase I resulted in the conceptual design for use of highly innovative piezo-crystal flexure devices for the vertical and horizontal high frequency controlled small motions for the "high density wire web motion generating system". As reported in our Phase II proposal the IEDC matching funds will be used to advance the project by building and testing prototypes for the

high density web motion generating system. Building and testing will require the purchase of piezo crystal stack devices, power amplifiers and instrumentation along with custom design and fabrication of flexures. Design, assembly and test of the system will be done by Aerodyn engineers and scientists and will be assisted with 2 undergraduate mechanical engineering research assistants under the supervision of the Aerodyn chief scientist. Purchase and fabrication of the system will be done by Aerodyn Engineering in Indianapolis and test of the system will be done at the Advanced Manufacturing Center of Excellence located on the Indiana University Purdue University Columbus (IUPUC) campus.

Budget for matching funds

Piezo crystal stacks	\$8,000
Amplifiers and control electronics	\$35,000
Design and fabrication	\$15,000
Test and Modifications	<u>\$17,000</u>
Total funds used	\$75,000