NEW MEXICO JUNIOR COLLEGE

BOARD MEETING

Thursday, November 19, 2015 Zia Room – Library

1:30 p.m.

AGENDA

A.	Welcome	Pat Chappelle
B.	Adoption of Agenda	Pat Chappelle
C.	Approval of Minutes of October 22, 2015	Pat Chappelle
D.	President's Report	Steve McCleery
E.	 New Business Monthly Expenditures Report Monthly Revenue Report Oil and Gas Revenue Report Schedule of Investments Consideration of Baseball Field Turf Replacement Consideration of Retirement Resolution 	Dan Hardin Dan Hardin Dan Hardin Dan Hardin Jeremy Capo Steve McCleery
F.	Public Comments	Pat Chappelle
G.	Announcement of Next Meeting	Pat Chappelle
Н.	Closure of Open Meeting	Pat Chappelle
I.	Adjournment	Pat Chappelle

NEW MEXICO JUNIOR COLLEGE BOARD MEETING OCTOBER 22, 2015 MINUTES

The New Mexico Junior College Board met on Thursday, October 22, 2015, beginning at 1:30 p.m. in the Zia Room of Pannell Library. The following members were present: Ms. Patricia Chappelle, Madam Chair; Mr. Ron Black, Secretary; Mr. Travis Glenn; Mr. Manny Gomez; Mrs. Mary Lou Vinson, Mr. Zeak Williams; and Mr. Hector Baeza.

Ms. Chappelle called the meeting to order and welcomed visitors and guests present: Dorothy Fowler, Hobbs News-Sun.

Upon a motion by Mrs. Vinson, seconded by Mr. Glenn, the agenda was unanimously adopted.

Upon a motion by Mr. Gomez, seconded by Mr. Williams, the Board unanimously approved the minutes of September 17, 2015.

Under President's Report, Mr. Darrell Beauchamp, Executive Director of the Western Heritage Museum provided updates on current and future events taking place at the Western Heritage Museum through the fall of 2018. Future events included "Christmas Traditions Around the World", "Wicked Plants" inspired by author Amy Stewart, the "Titanic", "A Mile in My Shoes", "In the Dark", and "Cowgirl Justice". Mr. Beauchamp also announced "Dinosaurs" will be returning in the spring of 2017. He provided details of areas at the museum that will be upgraded to include construction of a patio cover and the installation of a new camera system and new emergency doors. Mr. Beauchamp reported attendance numbers at the Western Heritage Museum was 2,379 for the month of September and 16,121 for the months of January, 2015 through September, 2015. He pointed out this is a significant increase from 2012 which reflected attendance of 8,900. Mr. Beauchamp also reported the Staked Plains Round Up held in the indoor rodeo arena this year was well received with approximately 2,000 in attendance. He commented these events would not be successful without the help of the many volunteers from the NMJC campus.

Mrs. Michele Clingman, Dean of Enrollment Management provided updates of the 50th Celebration held on October 3, 2015 which included NMJC Discover Day and a Color Dash Community Color Celebration. She stated the response to the activities taking place on campus was overwhelming and reported the NMJC Foundation raised \$4,160.00. She mentioned the combination of adding the Color Dash to Discover Day brought in a significant amount of non-traditional students. Mrs. Clingman also mentioned the across campus participation to make these events successful was outstanding.

Mr. Jeff McCool, Vice President for Training & Outreach provided updates of a meeting with Mr. Tommy Cope with Intercontinental Potash on September 29, 2015. The meeting consisted of a tour of the Instrumentation & Controls Lab and discussions regarding potential training needs for Intercontinental Potash. He stated the meeting with Mr. Cope resulted in a second Intercontinental Potash meeting on September 30, 2015 with Mr. Rudy Milligan, Maintenance Superintendent, and Mr. Ken Cramer, Chief Financial Officer, for further discussion of future training needs.

Dr. Larry Sanderson provided updates of the HLC Accreditation scheduled for November 8, 9, and 10, 2015. Mr. Sanderson presented a draft schedule of the various meetings to take place on the New Mexico Junior College campus. Dr. McCleery recognized Dr. Sanderson and Professor Charlotte Schmitz for their outstanding HLC Accreditation leadership.

Under New Business, Mr. Dan Hardin presented the September, 2015 financial reports. Upon a motion by Mr. Gomez, seconded by Mrs. Vinson, the Board unanimously approved the Expenditure Report for September, 2015. In addition, the Revenue Report, Oil and Gas Revenue Report, and Schedule of Investments Report were reviewed.

Mr. Dan Hardin presented the Fiscal Watch Reports for September, 2015. Upon a motion made by Mrs. Vinson, seconded by Mr. Black, the Board unanimously approved the Fiscal Watch Reports for September, 2015.

Dr. McCleery presented a proposal for approval from Dekker/Perich/Sabatini for the Professional Services Contract for the Design/Design Development/Construction of the NMJC Entertainment and Music Technology remodel at the Bob Moran Hall in the amount of \$200,000.00. In addition, Dr. McCleery requested consideration of transferring said funds from the reserve account. After significant discussion and upon a motion by Mr. Black, seconded by Mr. Glenn, the Board unanimously approved the contract and the transfer of funds.

Dr. Steve Hill recommended Ms. Diana R. Juarez for the Recruiter for Automotive Technology position at a 12 month salary of \$41,101.00. Upon a motion by Mr. Glenn, seconded by Mr. Gomez, the Board unanimously approved the employment of Diana R. Juarez, effective October 26, 2015.

Ms. Chappelle called for comments from the public. There being none, the next regular board meeting was scheduled for Thursday, November 19, 2015 beginning at 1:30 pm.

Mrs. Vinson moved the board go into closed session for the discussion of limited personnel matters under the provisions of section 10-15-1-H (2) of New Mexico Statutes Annotated 1978. Mr. Glenn seconded the motion. The roll call vote was as follows: Mr. Baeza – yes; Mr. Williams – yes; Mr. Black – yes; Mrs. Vinson – yes; Mr. Glenn – yes; Mr. Gomez – yes; and Ms. Chappelle – yes.

Upon re-convening in open meeting, Ms. Chappelle stated that the matters discussed in the closed meeting were limited only to those specified in the motion for closure.

pon a motion by Mrs. Vinson, seconded by Mr. Williams, the board meeting		
adjourned at 3:20 pm.		
Pat Chappelle, Chair	Ron Black, Secretary	



NEW MEXICO JUNIOR COLLEGE THURSTER STATEMENTS

2015-2016 DEPARTMENT GOALS

- 1. RINGS
- 2. DIPLOMAS
- 3. LEADERSHIP

AREAS OF EMPHASIS

2015-2016 PROGRAM AREAS OF SPECIAL EMPHASIS

- 1. Make a Difference: Make a difference in our student athletes lives through strong mentorship, positive leadership, and developing a caring & disciplined atmosphere in each program.
- 2. **Student Development**: Along with academic emphasis place a special emphasis on the personal development of our kids.
- 3. **Student Athlete Retention/Graduation Rates**: Achieve departmental goals of 80% retention rate, 75% graduation rate and 3.0 GPA.
- 4. **Service Opportunities**: Place an emphasis on creating worthwhile service opportunities for student athletes and staff to get involved in during the year. Help them to learn and understand the importance of giving of themselves and giving back to the community.
- 5. **Recruitment**: Continue emphasis on recruiting high character and high quality students-athletes.
- 6. NJCAA Rules Compliance: Create a positive attitude toward rules in all programs. Learn and follow all NJCAA Rules when in doubt ask!
- 7. **Fiscal Responsibility**: Strict adherence to all fiscal rules. Learn procedures and plan ahead to meet all deadlines. Review budgets on a regular basis and spend within budget limits.
- 8. **Alumni**: Develop all sports programs, alumni, and booster lists and develop a plan of contact for all sports.
- 9. **Development**: Look for ways individual programs can help with total department fundraising efforts and increase individual program enhancement opportunities. Improve communication and contact with former student-athletes and boosters.
- 10. **Compete**: Compete at the highest level possible in all programs

Program Outlook 2015-2016

RODEO

- Won two fall Rodeo's Eastern New Mexico | Texas Tech
- Preston Burr Sitting in first place in the region Steer Wrestling

CROSS COUNTRY

• Compete at Nationals on November 21, 2015 – Fort Dodge IA

GOLF

- Young team
- Looking to improve on 8th place finish at 2014 Championships

WOMEN'S BASKETBALL

- Pre-season ranked No. 4
- Sophomore, Alana da Silva NJCAA Top Sophomore
- Freshman, Shaniya Mitchell NJCAA Top Freshman
- Picked to win conference and region
- Return 5 sophomores off of a 29-4 team

MEN'S BASKETBALL

- New Head Coach Brian Lohrey
- NJCAA Top Sophomore Randy Haynes
- NJCAA Top Freshman El Hadji Dieng
- Young group
- Return 3 sophomores of a 23-9 team

INDOOR/OUTDOOR TRACK

- Begin indoor season January 15 @ Texas Tech
- Return 9 sophomores
- National Indoor meet in North Carolina March 4th
- Begin outdoor season March 24 @ Texas Tech
- National Outdoor meet in Levelland, TX

BASEBALL

- Begin season February 5 @ Tournament of Champions
- Return 15 sophomores



DEPARTMENT OF THE ARMY

US ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER PICATINNY ARSENAL, NEW JERSEY 07806-5000

19 July 2013

BUSINESS INTERFACE OFFICE

MEMORANDUM FOR

Mr. E. Dale Gannaway
Executive Director
New Horizons Resources, Inc.
1 Thunderbird Circle
Hobbs, New Mexico 882040

Dear Mr. Gannaway:

This is to inform you that the Cooperative Research and Development Agreement (CRADA) between the US Army Armament Research, Development and Engineering Center (ARDEC) and New Horizons Foundation, has been signed and approved by the Army. The signed copy for your records is enclosed. The ARDEC Principal Investigator, Dave C. Smith (518) 266-4741 will be your point of contact for this important work, in accordance with the terms of the CRADA.

Should you have any questions, please give me a call at (973) 724-7953 or contact me by email at timothy.s.ryan.civ@mail.mil.

Timothy S. Ryan

Office of Research and Technology Applications





MASTER COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT FOR

TRANSITION OF ARMAMENT SYSTEMS TECHNOLOGY TO OIL AND GAS INDUSTRIES BETWEEN

U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER PICATINNY ARSENAL, NJ 07806-5000

AND
NEW HORIZONS FOUNDATION
1 THUNDERBIRD CIRCLE
HOBBS, NEW MEXICO 88240

NEW HORIZONS FOUNDATION:

Mr. E. Dale Gannaway
Executive Director
New Horizons Resources, Inc.
1 Thunderbird Circle
Hobbs, New Mexico 88240
Office 575-492-4712
dgannaway@nmjc.edu

U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER:

Mr. Tim Ryan Office of Research and Technology Applications (973) 724-7953

Mr. Adam Fontana Legal Counsel (973) 724-9160

David C. Smith, P.E. Principal Investigator (518) 266-4741

The purpose of this Master Cooperative Research and Development Agreement is to establish a Master Agreement through which the U.S. Army Armament Research, Development and Engineering Center (ARDEC) and its member organizations, such as the U.S. Army Benet Labs and New Horizons Resources, Inc. (the Foundation) will collaborate on a regular basis to apply technology developed for weapon and ammunition purposes to, among others, the oil and gas exploration, recovery, transportation and refining industries. It is the intent of the parties that technology solutions

developed to meet oil and gas industry may also be applicable to future weapons systems for the Army and other military services. This work falls within the mission of ARDEC.

NTIS Category: 79G Ordnance/Guns

Table of Contents

Article 1 Definitions

Article 2 Cooperative Research

Article 3 Reports

Article 4 Financial Obligation

Article 5 Title to Property

Article 6 Software

Article 7 Inventions and Patents

Article 8 Data and Publication

Article 9 Representations and Warranties

Article 10 Termination

Article 11 Disputes

Article 12 Liability

Article 13 Miscellaneous

Article 14 Duration of Agreement and Effective Date

Appendix A Statement of Objectives

Appendix B Format for Estimate of the Parties Resources

Appendix C (Sample) CRADA Payment Attachment

Annex 1 - Statement of Work for Oil Well Sucker Rod Materials Investigation

NEW HORIZONS FOUNDATION AND

U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT & ENGINEERING CENTER COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT

The parties to this Master Cooperative Research and Development Agreement, authorized under Public Law 99-502 (the Federal Technology Transfer Act of 1986), as amended, and Executive Order 12591 (10 April 1987) are New Horizons Resources, Inc., dba New Horizons Foundation (the Foundation), a charitable Foundation incorporated in the State of New Mexico and the U.S. Army Armament Research, Development and Engineering Center (ARDEC), a laboratory of the United States Army.

- A. Whereas, ARDEC has developed a substantial body of knowledge concerning the composition, design, manufacture and operation of metal devices in very high pressure, corrosivity, and stress where product life, ease of replacement and standardization are very significant cost and safety issues. Further, ARDEC has also developed very substantial manufacturing capabilities (much of it unique in the United States) that can prototype devices and solutions created by ARDEC engineers to solve particular problems. All of these capabilities, created or developed as a result of its mission efforts are hereinafter referred to as "the Technology; and
- B. Whereas, the Foundation wishes to collaborate in the application of the Technology to develop or improve both new and existing products, processes and services for commercial purposes and to improve the position of the U.S. economy in world trade, as well as a variety of military applications; and
- C. Whereas, the use by the Foundation of ARDEC Technology will benefit the ARDEC mission.

Article 1. Definitions

As used in this Agreement, the following terms shall have the following meanings and such meanings should be equally applicable to both the singular and plural forms of the terms defined.

- 1.1 "Agreement" means this Master Cooperative Research and Development Agreement (CRADA).
- 1.2 "Invention" means any invention or discovery which is or may be patentable 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. 7321 et seq.).
- 1.3 "Made" in relation to any invention means the conception or first actual reduction to practice of such invention.
- 1.4 "Proprietary Information" means data or information that embodies trade secrets developed at private expense prior to or independent of this Agreement, or data or information which is confidential business or financial information provided that such data or information:

- (i) is not generally known or available from other sources without obligations concerning its confidentiality;
- (ii) has not been made available by the owners to others without obligation concerning its confidentiality; and
- (iii) is not already available to the Government and does not become available without obligation concerning its confidentiality.
- 1.5 "Subject Data" means all recorded information first produced in the performance of this Agreement
- 1.6 "Subject Invention" means any invention made in the performance of work under this Agreement.
- 1.7 "Subject Software" means all non-patentable software, software databases or software documentation first produced in the performance of this Agreement.
- 1.8 "Government License" means a non-exclusive, irrevocable, royalty free, paid-up license to use, practice or have practiced a Subject Invention, Subject Software, or Subject Data throughout the world by or on behalf of the U.S. Government.
- 1.9 "Nonreleasable ARDEC information" shall mean any information marked by ARDEC as "Nonreleasable ARDEC information." "Nonreleasable ARDEC information" may include, but is not limited to: any operational security information (OPSEC), limited distribution information, financial data, advanced procurement information (e.g., future requirements, statements of work, and acquisition strategies), source selection information (e.g., bids before made public, source selection plans, and rankings of proposals), trade secrets and other confidential business information (e.g., confidential business information submitted by a contractor), attorney work product, information protected by the Privacy Act (e.g., social security numbers, home addresses and telephone numbers), and other sensitive information (e.g., program, planning and budgeting system information).

Article 2. Cooperative Research

2.1 Statement of Work.

(a) Cooperative research performed under this Agreement shall be performed in accordance with Statements of Work (SOW), each of which must be agreed to by the parties before the commencement of any activity involving that SOW. A Statement of Objectives is attached at Appendix A to serve as a guide for developing the terms and conditions of each SOW to be incorporated into this Agreement. Specific issues to be addressed in each SOW include, but are not limited to: the scope of the activity, the specific approach through project completion; the amount and type of work to be performed by each party; a timeline including defined program milestones; a program review and report schedule; and specific sections addressing rights in intellectual property and data created during the SOW, and pertinent safety, security, and environmental concerns. A form to be used to provide an estimate of the parties'

- resources to be devoted to each SOW is attached as Appendix B, and will be agreed to by the parties and attached as part of each SOW to be incorporated into this Agreement. Specific issues to be addressed in Appendix B include, but are not limited to: a cost estimate and party responsible for such costs as well as a payment schedule and method.
- (b) Each SOW agreed to by the Parties will be attached to this Agreement as an additional Annex and its terms shall be incorporated by reference herein. The first SOW, "Oil Well Sucker Rod Materials Investigation" is incorporated herein as Annex 1.
- (c) <u>DEVELOPMENT</u>. The parties will jointly develop the terms and conditions of each SOW. ARDEC will assume responsibility to draft final signature documents, with the supporting milestone schedules with associated costs, and forward to THE FOUNDATION for signature and subsequent approval by ARDEC.
- (d) <u>APPROVAL PROCESS</u>. Each SOW shall be subject to final approval by the ARDEC Director, or his/her designee. Prior to such final approval however, each SOW will be reviewed and approved by the ARDEC Technology Transfer Manager, the ARDEC and Foundation Principal Investigator(s), the appropriate ARDEC Center executive, and the authorized representative of Foundation. It is expected that each SOW shall be processed by the parties in an expeditious manner.
- (e) <u>DURATION</u>. The timeline found in each SOW will set forth the estimated time required to complete the cooperative research proposed under such SOW. The duration of any SOW shall not exceed the duration of this Agreement.
- (f) Each party agrees to participate in the cooperative research and to utilize such personnel, resources, facilities, equipment, skills, know-how, and information, as it considers necessary, consistent with its own policies, missions and requirements. While assigned to any such cooperative research project, employees of a party shall remain employees of that party.
- 2.2 <u>Review of Work</u>. Periodic conferences shall be held between ARDEC and the Foundation to review the progress of work involving all SOWs. It is understood that the nature of this cooperative research is such that completion within the period of performance specified, or within the limits of financial support allocated, cannot be guaranteed. Accordingly, it is agreed that all cooperative research is to be performed on a best efforts basis.
- 2.3 <u>Principal Investigation</u>. ARDEC agrees that its portion of the work to be performed pursuant to this Agreement will be performed under the supervision of a principal investigator named in each SOW, and who shall have the responsibility for ARDEC's scientific and technical conduct of that SOW. ARDEC's Principal Investigator for overall Master Agreement coordination will be David C. Smith. The Foundation agrees that its portion of the work to be performed pursuant to this Agreement will be performed under the supervision of a principal investigator who shall be named in each SOW and who shall have the responsibility for the Foundation's scientific and technical conduct of that SOW. The Foundation's Principal Investigator for overall Master Agreement coordination will be E. Dale Gannaway.

- 2.4 <u>Scope Change</u>. Either party may request changes to a SOW, which, if agreed to by the other party, shall be made in writing in accordance with section 13.6 hereof. Both parties agree to make a good faith effort to agree on any necessary change to the SOW.
- 2.5 <u>Use of Facilities</u>. Facilities space at ARDEC's various physical locations may be provided to the Foundation, as appropriate, for performance of work under this Agreement, subject to terms and conditions to be negotiated and agreed upon in writing. The amount of space provided, however, will be limited to that space necessary for the efficient pursuit of effort falling under the SOW of this or any other CRADA between ARDEC and the Foundation.

Article 3. Reports

- 3.1 <u>Final Report</u>. Within 1 month after the completion of work under a SOW which has been incorporated hereunder, ARDEC and the Foundation shall prepare a final joint written report on the technical progress made and the results obtained, identifying such problems as may have been encountered, identifying Subject Inventions and valuable Software and Subject Data created there under and establishing goals and objectives requiring further effort.
- 3.2 Interim Reports. In the event that the work under a SOW extends beyond one year from the date of this Agreement, then within one month following each annual anniversary of such date, ARDEC and The Foundation shall prepare joint annual interim reports describing the technical progress made, identifying such problems as may have been encountered, identifying Subject Inventions and valuable Software and Subject Data created there under and establishing goals and objectives requiring further effort.

Article 4. Financial Obligation

The financial obligations of each party in connection with the work to be performed under any SOW shall be agreed to between the parties and set forth in such SOW.

Article 5. Title to Property, Disposal of Hazardous and Other Materials

- 5.1 <u>Prior Equipment</u>. Title to any equipment acquired prior to or during the term of this Agreement shall remain the property of the party that purchased the same unless otherwise agreed to between the parties in writing.
- 5.2 New Equipment. Any Government Furnished Equipment (GFE) made available to Foundation under this Agreement shall remain the property of the U.S. Government and be used solely for the performance of the effort contemplated by this Agreement. Title to equipment to be acquired in connection with work under a proposed SOW shall be negotiated in advance by the parties and set forth in such applicable SOW. Upon completion of research under this Agreement (including under each SOW to be incorporated herein), the Foundation shall be responsible, except as otherwise agreed to by the parties in any SOW, for all costs attendant to the maintenance, removal, storage, and shipping of equipment to which it holds title.

5.3 <u>Identification of Toxic, Hazardous, and Other Waste</u>. The parties shall, when the generation of toxic, hazardous, or other wastes is expected during the course of the Agreement, agree upon the expected type and quantity of such waste to be generated, the costs and availability of required disposal permits, and the cost of disposal. Except as the parties shall otherwise agree in any SOW incorporated hereunder, the Foundation agrees to pay to ARDEC, all such costs. Safety, security, and environmental issues shall be addressed in each SOW as appropriate.

Article 6. Software

- 6.1 <u>Prior Software</u>. The parties agree that all software, software databases and/or software documentation created prior to this Agreement shall remain the property of the party that owned or controlled such material prior to execution of this Agreement.
- 6.2 <u>Foundation Subject Software</u>. Title to any copyright in Subject Software written only by Foundation employees, contractors or consultants in the course of performance of this AGREEMENT shall be held by the Foundation. The Foundation agrees, however, to grant to the U.S. Government a Government License written by its employees.
- 6.3 <u>Joint Subject Software</u>. Title to any copyright in subject software written jointly by Foundation and ARDEC employees in the course of performance of this AGREEMENT shall be held jointly.
- 6.4 <u>ARDEC Subject Software</u>. Subject Software created by ARDEC employees in the course of performance of this AGREEMENT, is considered to be the property of ARDEC. ARDEC agrees to grant to the Foundation a non-exclusive, irrevocable, royalty-free, paid-up license to use said Subject Software, subject however to the following restrictions:
- a. The Foundation shall not copy said ARDEC employee software without the prior written approval of the ARDEC Director or his/her designee;
- b. The Foundation shall not distribute, license or sublicense said ARDEC employee software to third parties; and
- c. Upon written request, the Foundation may obtain additional copies of said ARDEC employee software.
- 6.5 <u>Foundation Subject Software</u>. Subject Software created by Foundation employees in the course of performance of this AGREEMENT, is considered to be the property of the Foundation. The Foundation agrees to grant to ARDEC a non-exclusive, irrevocable, paid-up license to use said Subject Software however, subject to the following restrictions:
- a. ARDEC shall not copy said Foundation employee software without the prior written approval of the Foundation;

- b. ARDEC shall not distribute, license or sublicense said Foundation employee software to third parties; and
- c. Upon written request, ARDEC may obtain additional copies of said Foundation employee software.
- 6.6. <u>Limits on Rights to Software</u>. ARDEC does not own all software resident in its computers that may be used in the course of work under this AGREEMENT, and characteristically is the licensee of such software. Consequently, in such instances ARDEC will not provide software, or rights to software to the Foundation. ARDEC will only demonstrate the software on ARDEC computer systems. It will be the responsibility of the Foundation to obtain the appropriate hardware and software rights to run the Technology developed under this AGREEMENT.
- 6.7 Nothing in this Article 6 shall prohibit the parties from negotiating Software rights in each individual SOW Annex to this Agreement.

Article 7. Inventions and Patents

- 7.1 <u>Prior Inventions and Related Patents.</u> The parties hereto agree that neither party shall have rights in any invention made by the other before the date of this Agreement, except for those rights provided by law or under specific agreement.
- 7.2 <u>Reporting.</u> Each of the parties shall promptly, and in any event within 60 days of discovery report in writing to the other party any Subject Inventions made by their respective employees during course of activity under this AGREEMENT. Such report shall be in sufficient detail to enable someone with skill in the art to make or such Subject Invention.
- 7.3 Foundation Inventions. The parties agree that the Foundation shall have the initial option to retain title to any Subject Invention made only by the Foundation employees during the course of this AGREEMENT. The Foundation shall promptly notify ARDEC upon making this election and in the event that the Foundation retains title to said Subject Invention, The Foundation agrees to timely file and prosecutes patent applications on such Subject Inventions at its own expense. The Foundation further agrees to grant to the U.S. Government a Government License to practice such Subject Invention. The Foundation agrees to prepare such a license in a form satisfactory to ARDEC. The Foundation may release the rights provided for by this paragraph to its employee inventors subject to such ARDEC Government License as described above.
- 7.4 <u>ARDEC Inventions</u>. The parties agree that ARDEC, on behalf of the U.S. Government shall have the initial option to retain title to each Subject Invention made only by its employees. ARDEC shall promptly notify the Foundation upon making this election, and in the event that ARDEC retains title to said Subject Inventions, ARDEC agrees to timely file and prosecute patent applications thereon at its own expense and agree to grant to the Foundation a non-exclusive, irrevocable, paid-up license to practice such Subject Invention throughout the world. ARDEC may release the rights provided for by this paragraph to its inventors subject to a license in the Foundation as described above.

- 7.5 <u>Joint Inventions.</u> The parties agree that ARDEC, on behalf of the U.S. Government shall have the initial option to retain title to each Subject Invention Made jointly by the Foundation and ARDEC employees. ARDEC shall promptly notify the Foundation upon making this election and in the event that ARDEC informs the Foundation that it elects to retain title to such joint Subject Invention, The Foundation agrees to assign to ARDEC whatever right, title and interest the Foundation has in and to such joint Subject Invention. ARDEC agrees to timely file and prosecute patent applications on such Subject Invention at its own expense and agrees to grant to the Foundation a non-exclusive, irrevocable, royalty-free, paid-up license to practice such Subject Invention throughout the world. (See Exclusive License, 7.7)
- 7.6 Filing of Patent Applications. The party (the "inventing party") having the right to retain title and file patent applications on a specific Subject Invention must elect to file patent applications thereon and advise the other party within 180 days from the date it reports the Subject Invention to such other party. In the event that the inventing party fails to make such an election and so advise the other party within 180 days from the date it reports the Subject Invention, the other party may elect to file patent applications on such Subject Invention. If the other party elects to file patent applications, the inventing party agrees to assign its rights, title and interest in such Subject Invention to the other party and to cooperate with such other party in the preparation and filing of patent applications thereon. The assignment of the entire right, title and interest to the other party pursuant to this paragraph shall be subject to the retention by the inventing party of a non-exclusive, irrevocable, royalty free, paid-up license to practice, or have practiced, the Subject Invention throughout the world. In the event neither of the parties to this AGREEMENT elect to file a patent application on Subject Invention, either or both (if a joint invention) may, at their sole discretion and subject to reasonable conditions, release the right to file to the inventors subject to the retention of a non-exclusive irrevocable, royalty free, paid-up license to be held by the Foundation and ARDEC.

7.7 Exclusive License

- 7.7.1 Grants. ARDEC shall notify the Foundation of the filing date within 30 days of filing of a patent application. If requested by the Foundation within 6 months after the date of filing of such application, ARDEC may, on behalf of the U.S. Government, subject to applicable regulations and statutes, grant to the Foundation a limited term exclusive license in each U.S. patent application filed by ARDEC covering a Subject Invention, and patents issued thereon.
- 7.7.2 Exclusive License Terms. Upon filing of a patent application on a Subject Invention and receipt of a request by the Foundation, ARDEC may grant to the Foundation a limited term exclusive license in a Subject Invention upon rates, terms and conditions acceptable to ARDEC, including an ARDEC share in sublicensing royalties of no less than 33 percent.
- 7.7.3 If the parties cannot mutually agree upon reasonable license terms and conditions, ARDEC shall, as required by Section 7.4 hereto, provide to the Foundation an irrevocable, non-exclusive, royalty free, paid up license to practice such an invention throughout the world.

- 7.7.4 Extension of Exclusive Licenses. Requests by the Foundation for extensions of a limited term exclusive license may be filed at any time prior to the expiration of the limited term exclusive license already in existence.
- 7.8 <u>Patent Expenses</u>. All expenses of the filing of patent applications shall be borne by the party filing the patent application. Each party shall provide the other party with copies of the patent applications it files on a Subject Invention along with the power to inspect and make copies of all documents retained in the official patent application files by the applicable patent office.
- 7.9 <u>Maintenance Fees</u>. The fees payable to the U.S. Patent and Trademark Office in order to maintain the patent's enforcement will be payable by the owner of the patent, at that party's option. In the event that ARDEC is the owner of the patent and the Foundation holds an exclusive license in said patent, the foundation shall pay all maintenance fees for said patent. If the Foundation elects not to pay the maintenance fee, the Foundation must relinquish its exclusive license rights in said patent and must give ARDEC reasonable notification so as to permit ARDEC the option of paying said fee. In the event that the Foundation elects not to pay the maintenance fee and ARDEC elects to exercise its option to pay said fee, the Foundation will retain a non-exclusive, irrevocable, royalty free, paid-up license in said patent.
- 7.10 Nothing in this Article 7 shall prohibit the parties from negotiating Invention and Patent rights in each individual SOW Annex to this Agreement.

Article 8. Data and Publication

- 8.1 <u>Prior Data or Information</u>. The parties agree that rights in data or information known, acquired or created prior to this Agreement shall remain with the party creating such data.
- 8.2 <u>Right of Access.</u> ARDEC and the Foundation agree to promptly exchange all Subject Data produced in the course of research under this AGREEMENT, whether developed solely by ARDEC, jointly by both parties, or solely by the Foundation. Subject to the provisions of paragraph 6.3, all Subject Data produced under this AGREEMENT shall be owned jointly by the parties.

8.3 Proprietary Information.

(i) If Proprietary Information will be provided by the Foundation to ARDEC during the course of this AGREEMENT, the Foundation shall place the phrase "FOUNDATION PROPRIETARY" (or some similar phrase) on each page of disclosing information or data developed prior to or independent of this AGREEMENT. ARDEC agrees that any such marked Proprietary Information furnished by THE Foundation to ARDEC under this AGREEMENT, or in contemplation of this AGREEMENT, shall be used by ARDEC only for the purpose of carrying out the objective of this AGREEMENT. Such marked Proprietary Information shall not be disclosed, copied, reproduced or otherwise made available outside the U.S. Government in any form whatsoever without the prior written consent of the Foundation except as such information may be subject to disclosure under the Freedom of

Information Act (5 U.S.C. 552). ARDEC agrees to use best efforts to protect from unauthorized disclosure said information designated and marked as proprietary under this Section 8.3.

- (ii) For a period of up to five (5) years after creation of Subject Data that would be a trade secret, commercial and/or financial information that would be privileged or confidential if the information had been obtained solely from a non Federal party, ARDEC may provide appropriate protection against the dissemination of such Subject Data, including exemption from Subchapter II of Chapter 5 of Title 5. (See 15 U.S.C. 3710a(c) (7) (B)) Such protection shall be provided upon written request by the Foundation, provided that the information has not entered the public domain. ARDEC shall, however, retain a Government License in such data.
- (iii) If ARDEC provides either proprietary data or Nonreleasable ARDEC information to the Foundation during the course of this AGREEMENT, ARDEC may place the phrase "ARDEC Proprietary" or "Nonreleasable ARDEC Information" as appropriate on each page of information developed prior to or independent of this AGREEMENT and plainly mark the data considered proprietary or nonreleasable. The foundation agrees that any such marked Proprietary Information or Nonreleasable ARDEC Information furnished by ARDEC to the Foundation under this AGREEMENT, or in contemplation of this AGREEMENT, shall be used by the Foundation only for the purpose of carrying out this AGREEMENT. Such marked Proprietary Information or Nonreleasable ARDEC Information shall not be disclosed, copied, reproduced or otherwise made available outside the Foundation in any form whatsoever without the prior written consent of ARDEC unless the Foundation is required to do so by court directive, law or regulation otherwise, provided that the Foundation shall notify ARDEC of any such court directive, law or regulation and provide ARDEC the opportunity to, at its own expense, intervene and fight such directive to prohibit such mandated disclosure.

8.4 Release Restrictions.

- (i) ARDEC in reporting on the results of activities under this Agreement may publish Subject Data in technical articles and other documents to the extent it determines to be appropriate, subject to the restrictions in Sections 8.3, 8.4 and 8.5 of this Agreement; and
- (ii) ARDEC may release such Subject Data, subject to 8.2 and 8.3 above, where such release is required pursuant to a request under the Freedom of Information Act (5 U.S.C. 552); except that such data will not be released to the public if a patent application is to be filed (35 U.S.C. Section 205) until the party having the right to file has had a reasonable time to file. Neither party shall make any disclosure that may adversely affect the other party's rights in such data.
- 8.5 <u>Publication</u>. Each of ARDEC and the Foundation agree that both parties shall have the right to publish Subject Data in either a report and/or in the open literature with the consultation of the other party's Principal Investigator. Any such publication will be co-authored as appropriate by both parties with the decision concerning the principal author dependent upon the content of the proposed publication. Any such publication(s) will require reasonable notice to and consultation between the parties prior to the publication of Subject Data in order to jointly assure that no Proprietary Information is released and that ample opportunity to file patent applications in a timely manner is available.

8.6 Nothing in this Article 8 shall prohibit the parties from negotiating Data rights in each individual SOW Annex to this Agreement.

Article 9. Representations and Warranties

- 9.1 <u>Representations and Warranties of ARDEC</u>. ARDEC hereby represents and warrants to THE FOUNDATION as follows:
- 9.1.1 Organization. ARDEC is a Federal laboratory of the United States Army and is an Agency of the Government of the United States.
- 9.1.2 Mission. The performance of the activities specified by this Agreement is consistent with the mission of ARDEC.
- 9.1.3 Statutory Compliance. Reviews and approvals required by regulations or law have been obtained by ARDEC prior to the execution of this Agreement and the ARDEC official executing this Agreement has the requisite authority to do so.
- 9.2 <u>Representations and Warranties of the Foundation.</u> The Foundation hereby represents and warrants to ARDEC as follows:
- 9.2.1 Corporate Organization. The Foundation, as of the date hereof, is a corporation duly organized, validly existing and in good standing under the laws of the State of New Mexico.
- 9.2.2 Due Authorization. The Foundation has taken all actions required to be taken by law, its Certificate or Articles of Incorporation, its bylaws or otherwise, to authorize the execution and delivery of this Agreement.
- 9.2.3 No Violation. The execution and delivery of this Agreement does not contravene any material provision of, or constitute a material default under any material agreement binding on the Foundation or any valid order of any court, or any regulatory agency or other body having authority to which The Foundation is subject.

Article 10. Termination

10.1 <u>Termination</u>. The parties may elect to terminate this Agreement or portions thereof (including any outstanding SOW) by mutual consent or by unilateral action at any time by giving the other party written notice, not less than 30 days prior to the desired termination date. In such event, the parties will take all actions necessary to promptly settle any post-termination matters.

Article 11. Disputes

11.1 <u>Settlement.</u> The Foundation and ARDEC recognize that disputes arising under this Agreement are best resolved at the local working level by the parties directly involved. Any dispute arising under this Agreement which is not disposed of by agreement of the parties at the working level shall be submitted jointly to the then head of the ARDEC or his/her designee and the head of the Foundation or his/her designee for resolution.

Article 12. Liability

- 12.1 <u>Property</u>. THE FOUNDATION will be responsible for damage to ARDEC equipment and facilities by Foundation employees, agents, and/or business invitees.
- 12.2 <u>Sponsor's Employees</u>. The Foundation agrees to indemnify and hold harmless the U.S. Government for any loss, claim, damage, or liability of any kind involving an employee of the Foundation arising in connection with this Agreement, except to the extent that such loss, claim, damage or liability arises from the negligence of ARDEC or its employees, as specified in the provisions of the Federal Tort Claims Act.
- 12.3 No Warranty. Except as specifically stated in Article 9 hereto, neither of ARDEC nor the Foundation make any express or implied warranty as to any matter whatsoever, including the conditions of the research or any invention or product or data exchanged, whether tangible or intangible, without limitation, made, or developed under this Agreement, or the ownership, merchantability, or fitness for a particular purpose of the research or any invention or product. A clause to this effect shall be included in any reports generated under this Agreement.
- 12.4 <u>Force Majeure</u>. Neither party shall be liable for any unforeseeable event beyond its reasonable control not caused by the fault or negligence of such party, which causes such party to be unable to perform its obligations under this Agreement and which it has been unable to overcome by the exercise of due diligence. In the event of the occurrence of such force majeure event, the party unable to perform shall promptly notify the other party and shall use its best efforts to resume performance as quickly as possible
- 12.5 <u>Indemnification</u>. The Foundation agrees, subject to state of New Mexico appropriations, to hold the U.S. Government harmless and indemnifies the U.S. Government for all liabilities, demands, damages, expenses and losses arising out of the use by the Foundation, or any party acting on its behalf or under its authorization, of ARDEC's research and technical developments or out of any use, sale or other disposition by the Foundation or others acting on its behalf or with its authorization, of products made by the use of ARDEC's technical developments. This Section 12.5 shall survive termination of this Agreement. Commercialization of technology developed under this AGREEMENT will involve subsequent license agreements which shall include provisions indemnifying the Government from liability.

Article 13. Miscellaneous

13.1 No Benefits. No member of, or delegate to the United States Congress, or resident commissioner, shall be admitted to any share or part of this Agreement, nor to any benefit that may

arise therefrom; but this provision shall not be construed to extend to this Agreement if made with a corporation for its general benefit.

- 13.2 <u>Governing Law.</u> The construction, validity, performance and effect of this Agreement for all purposes shall be governed by the laws applicable to the Government of the United States.
- 13.3 <u>Entire Agreement</u>. This Agreement constitutes the entire agreement between the parties concerning the subject matter hereof and supersedes any prior understanding or written or oral agreement relative to said matter.
- 13.4 <u>Waivers</u>. None of the provisions of this Agreement shall be considered waived by any party hereto unless such waiver is given in writing to all other parties.
- 13.5 <u>Severability</u>. The illegality or invalidity of any provisions of this Agreement shall not impair, affect or invalidate the other provisions of this Agreement.
- 13.6 <u>Amendments</u>. Any modification to this Agreement (including any SOW incorporated by reference herein) shall be in writing, signed by all parties hereto, and approved as appropriate.
- 13.7 <u>Assignment</u>. Neither this Agreement 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 except that the Foundation may assign this Agreement to the successors or assignees of a substantial portion of the Foundation's business interests to which this Agreement directly pertains.
- 13.8 <u>Notices</u>. All notices pertaining to or required by this Agreement shall be in writing, signed by an authorized representative and shall be delivered by registered or certified mail (return receipt requested), or via Federal Express (or other comparable overnight service), or via facsimile or e-mail (with confirmation of transmission mailed to receiving party) as follows:

If to the Foundation:

E. Dale Gannaway
Executive Director
New Horizons Foundation
1 Thunderbird Circle
Hobbs, New Mexico 88240
dgannaway@nmjc.edu

If to ARDEC:

U.S. Army Armament Research, Development & Engineering Center

ATTN: RDAR-EIB (T. Ryan)

Building 93

Picatinny Arsenal, NJ. 07806-5000

Telephone: (973)724-7953

E-Mail: timothy.s.ryan.civ@mail.mil

Either party hereto may change such address by notice given to the other party in the same manner.

- 13.9 <u>Independent Contractors.</u> Neither party shall be an agent of the other, both being independent contractors.
- 13.10 <u>Use of Name or Endorsements.</u> Neither party shall use the name of the other party or its employees on any product or service which is directly or indirectly related to this Agreement without the prior written approval of the other party except that both parties are free to publicly announce the existence of this Agreement. By entering into this Agreement neither party directly or indirectly endorses any product or service provided, or to be provided, by the other party, its successors, assignees, or licensees.
- 13.11 Compliance with Export Control. This AGREEMENT is subject to United States laws and regulation controlling the export of technical data; computer software, laboratory prototypes and all other export controlled commodities. These laws include, but are not limited to the Arms Export Control Act and Export Administration Act as they may be amended. All rights granted by this AGREEMENT are contingent upon compliance with these laws and regulations. The Foundation shall not, directly or indirectly, export any export controlled commodities, which are subject to this AGREEMENT, unless the required authorization and/or license is obtained from the required government agency(ies) prior to export. The Foundation shall notify ARDEC in writing 30 days prior to of its intent to obtain an export license for technologies and/or equipment resulting under this AGREEMENT. By granting rights in this AGREEMENT, ARDEC does not represent that export authorization or an export license will not be necessary or that such authorization or export license will be granted.
- 13.12 <u>Manufacture.</u> The parties agree that a purpose of this Agreement is to provide substantial benefit to the U.S. economy. To the extent feasible, the parties agree to exercise reasonable efforts to manufacture substantially in the United States products embodying intellectual property developed under this Agreement.
- 13.13 <u>Classified Data</u>: An exchange of classified data shall comply with appropriate Department of Defense Contract Security Classification Specification and Industrial Security Manual.

Article 14. Duration of Agreement and Effective Date

- 14.1 <u>Duration of Agreement.</u> In no case will this Agreement extend beyond 5 years from the date of this Agreement, unless it is extended in accordance with Section 13.6 of this Agreement. The provisions of Article 3 "Reports"; Article 5 "Title to Property"; Article 6 "Software"; Article 7 "Inventions and Patents"; Article 8 "Data and Publications"; Article 12.5 "Indemnification"; and Article 13.10 "Use of Name or Endorsements" and the specific software, intellectual property and data provisions of each SOW shall survive the termination of this Agreement.
- 14.2 Effective Date. The effective date of this Agreement shall be the latest date of execution below.

IN WITNESS WHEREOF: the parties have caused this Agreement to be executed by their duly authorized representative as follows:

(signature)	1-10-2013
Mr. E. Dale Gannaway	
Executive Director	
1 Thunderbird Circle	
Hobbs, New Mexico 88240	
For ARMAMENT RESEARCH, DEVELOPMENT AND EN	GINEERING CENTER

Director

U.S. Army Armament Research, Development and Engineering Center RDAR-D

Date: 1/19/13

Picatinny Arsenal, NJ 07806-5000

Appendix A

STATEMENT OF OBJECTIVES

ARDEC and New Horizons Foundation, (hereafter the Foundation) are parties to that certain Master Cooperative Research and Development Agreement dated as of ______ (as amended or otherwise modified from time to time, the "Agreement"). This Statement of Work (SOW) is entered into pursuant to the Agreement and, upon approval by the appropriate parties as required by the terms of the Agreement, shall be incorporated by reference and made a part of the Agreement. Terms used herein but not otherwise defined herein shall have the meanings set forth in the Agreement (including any Appendices thereto or any previously incorporated Statements of Work.

1. BACKGROUND

ARDEC and its member organizations, such as U.S. Army Benet Labs, as part of its weapons programs, have developed a very large body of knowledge, intellectual property, facilities and equipment concerning the operation of metal devices in very high pressure, heat, and corrosivity where cost of replacement of a metal device is very high and where the impact of failure is not acceptable. The Foundation, located in the midst of one of the major United States oil and gas production regions, has as it constituency very large to very small oil and gas exploration, production, transportation and refining companies and a myriad of businesses (large and small) that service such companies and their activities. While the objectives of these two organization and their constituencies are quite different, the technologies involved in much of their operations are very similar.

ARDEC has a deep understanding of metal fatigue, corrosion avoidance and minimization, wear mitigation and avoidance, high pressure – high heat environments, and the metallurgical, diagnostic, predictive, design and prototyping involved in these areas. The Foundation constituency is fully committed to oil and gas exploration, recovery, transportation and refining, all of which involve each one of the above issues in which ARDEC holds not only successful but also significant problem solving ability. Because of the size and intensity of such activity in the Foundation 's area operation, many significant problems involving these technical challenges that would never otherwise be known will be brought before ARDEC scientists and engineers. Adaption of ARDEC capabilities to Foundation constituent problems will not only provide ARDEC engineers and scientists with expanded experience in their individual fields of specialty, maintaining and expanding proficiency but will also provide many opportunities to transfer solutions to Foundation problems to Army problems of a similar nature.

The New Horizon Foundation is a not for profit organization dedicated to economic growth of the city of Hobbs and Lea County New Mexico. The Foundation operating area is directly in the oil

and gas producing basin that stretches from Texas into New Mexico. Recalling the devastation to the community of the early 1960s when oil production crashed, the unexpected oil production boom that directional drilling and hydraulic fracturing has brought to the area, city leaders created the Foundation as a way to bring technology based businesses to the area to expand opportunities for Lea County residents into the future, even after current oil and gas resources are depleted. Utilizing the economic strength of the oil and gas industry as a starting point, the Foundation intends to identify problems involved in the exploration, extraction, production, and transportation of oil and gas and resulting products as a sensible starting point for a technology pull effort that will utilize Defense Laboratories capabilities (among other sources) to bring technology based solutions to a community intending to either start or expand businesses that can commercialize those technology solutions.

Utilizing its own resources, the Foundation initially intends to seek out inefficiencies, problems, and opportunities presented by the very strong oil and gas industry activity in the Hobbs area; gather the facts concerning the opportunities; and work with ARDEC personnel to identify likely technology based solutions. Where appropriate, the Foundation will provide Foundation funding to support ARDEC development efforts, bringing the ARDEC technology solutions home to New Mexico where it will utilize an array of resources to commercialize these solutions for the benefit of the businesses in the surrounding area, the United States oil and gas industry, and, if appropriate, enter the solutions into the world oil and gas market place.

The Foundation intends to provide a leadership role in several areas – utilization of the Federal Laboratory system and its capabilities to solve problems in the US domestic economy, commercialization of Defense sourced technology solutions to diversify the local and south east New Mexico economy and utilization those laboratories to speed technology commercialization with design, engineering, manufacturing, and logistic advice.

2. OBJECTIVE

Through cooperative research and development, the parties intend to utilize ARDEC technology skill and capabilities to solve important technology problems raised by the Foundation for the benefit of the United States energy sector while providing an opportunity to apply solutions of value to issues of importance to the warfighter.

3. APPROACH

The Foundation will identify problems of significant importance to Foundation constituents, collect relevant information, and request from ARDEC information on the potential for the adaption of ARDEC technology to solve the problem. If ARDEC proposed solutions are acceptable to the Foundation (considering effectiveness, cost, timeliness, duration, adaptability, manufacturability, and similar issues) it will enter into an individual annex to apply the ARDEC

solution(s) to the Foundation identified problem utilizing Foundation sourced funding to support the ARDEC effort.

ARDEC will receive problem statements from the Foundation and, after receiving sufficient clarifying information, develop one or more proposed solutions to such problem, identifying critical issues such as effectiveness, cost, timeliness, duration, adaptability, manufacturability, and the like. Working with the Foundation, ARDEC will craft an Annex scope of work acceptable to both parties including milestones, tasks for each party, costs for Foundation payment, progress report schedule, and other issues required under this Agreement.

4. OTHER CONSIDERATIONS (e.g., Safety, Security, Property, Software, Inventions, Data)

Each of these areas, as applicable will be covered in an individual annex.

Appendix B (Optional)

FORM OF

RESOURCE ESTIMATE OF THE PARTIES

(To be attached to relevant SOW)

Describe the technological expertise, facilities, equipment, funds, software, intellectual property, and other resources each party expects to contribute to the collaborative effort.

The Foundation will provide information describing the issues involved, suggestions on the application of various solutions, testing of one or more ARDEC proposed solutions and responses on performance, and funds required in accordance with each annex.

ARDEC will provide one or more proposals aimed at the problems brought to ARDEC by the Foundation. ARDEC may, in the course of identifying solutions, bring in outside Federal or other laboratories to propose parts of any solution after clear notice to the Foundation and in a way that preserves the confidentiality of Proprietary Information. Such proposals will address critical issues such as effectiveness, cost, timeliness, duration, adaptability, manufacturability, and the like. Working with the Foundation, ARDEC will craft an Annex that both parties can accept and, after approvals described herein, undertake each annex.

1. FINANCIAL OBLIGATIONS

- 1.1 <u>Payment Option</u>. Prior to beginning work under this SOW, ARDEC and the Foundation will agree to a predetermined estimated cost of ARDEC's effort for the first <30-60-90> day period of that effort. The foundation will pay that agreed upon amount prior to the start of any work under this SOW. Thereafter, the Foundation will maintain a <30-60-90> day advance of funds equal to the predetermined estimated cost of ARDEC's effort for any subsequent <30-60-90> day period.
- 1.2 <u>Payment.</u> Payments shall be made by check, made payable to <u>Defense Accounting Office</u>. Payments shall include a note referencing the Agreement and the office symbol, cost center, and contact person in the ARDEC organization to receive the payment via Mail or hand deliver payments to:

U.S. Army ARDEC
Managerial Accounting Officer
ATTN: RDAR-FMA (Catherine Croft)
Building 93
Picatinny Arsenal, NJ 07806-5000

Or (See each SOW Annex for payment instructions)

Department of the Army RDAR-FMO Benet Labs (Attn: Keith Johnson) 1 Buffington Street, Bldg 40 Watervliet, NY 12189-4000

- 1.3 <u>Insufficient and Excess Funds.</u> ARDEC shall not be required to continue its research and development activities under this SOW if the funds provided by the Foundation are insufficient to cover ARDEC's full cost for such continued activities. If ARDEC determines that funds provided by the Foundation are insufficient, ARDEC will so notify the Foundation prior to cessation of ARDEC's research and development activities so that appropriate funding adjustments can be made. Funds not expended by ARDEC shall be returned to the Foundation upon ARDEC's submission of a final fiscal report to the Foundation.
- 1.4 <u>Accounting Records</u>. ARDEC shall maintain separate and distinct current accounts, records, and other evidence supporting all its expenditures under this SOW.

Appendix C (Sample) CRADA PAYMENT ATTACHMENT

Date:			
MEM	ORANDUM FOR:		
	U.S. Army ARDEC		
	Managerial Accounting Office		
	ATTN: RDAR-FMA (Catherine Ci	oft)	
	Building #93, 3rd Floor	,	
	Picatinny Arsenal, NJ 07806-5000		
FRON			
	City/State/Zip:		
	Company POC:		
	Company POC Phone Number:		_
REFE	RENCE: CRADA entitled		
	ARDEC POC Name:		
	ARDEC POC Phone Number	er:	
1.	Is this the Initial Funding?	Yes	No
2.	Is this an Incremental Increase to ex	isting Project? Yes	No
3.	Is this a Master CRADA?	Yes No	
4.	If this is an Annex to a Master CRA	DA, what is the Annex Number:	
	What is the Annex Title:		
5.	TOTAL AMOUNT OF CHECK: \$		
6.	Additional Clarifying Remarks (if a	ppropriate):	
		(Signature)	
		(Title/Authority)	
		(Commercial Phone Number)	

ANNEX 1 STATEMENT OF WORK FOR

Oil Well Sucker Rod Materials Investigation

1.0 SCOPE:

This Scope of Work (SOW) encompasses the efforts required by ARDEC/Benet Laboratories to explore problems related to sucker rods used in active oil wells, and to develop potential approaches to improve the rod or the pump systems to extend life and reduce costs. Currently, these rods are subjected to extreme environmental and stress conditions that have similarities to cannon systems. These rods also use materials and techniques similar to those of cannon tubes. So these rods are expensive to make, must be inspected frequently, and have limited life from both fatigue and erosion impacts.

ARDEC/Benet Laboratories shall receive materials and environment samples to establish a baseline. The objective is to first establish concepts for laboratory test methods and modeling that will duplicate conditions experienced in oil wells. The further objective is to build on the knowledge gained and apply our knowledge of materials and coatings used in adverse armament environments to recommend alternatives to be explored for improvements. Improvements here would entail extending the currently very limited life of the sucker rods, developing lower cost methods of manufacture, improvements in the overhaul, or any approach that could reduce total ownership costs. Jointly, Benet and New Horizons shall develop follow on programs to develop the analysis techniques into validated processes, analyze problems, develop selected alternatives into breadboard level prototypes, and mature promising technologies to a production and field applied solution. Benet shall provide the necessary assessment, technical expertise, safety evaluation, and documentation to support these efforts. New Horizons shall organize forums and communications to facilitate these efforts.

2.0 REFERENCES: None

3.0 REQUIREMENTS:

<u>Program Management-</u> ARDEC/Benet Laboratories (hereinafter Benet) shall devote the necessary engineering personnel and facilities to accomplish the analysis of the elements as described in tasks contained in this SOW. Benet shall appoint a Point of Contact to serve as the focal point for all communication flow relative to this Annex.

All direction concerning this work scope shall only be authorized through the assigned New Horizons Point of Contact. No other New Horizons representative is authorized to make any commitment to Benet or make any change to the terms, conditions, or technical provisions of this SOW. New Horizons shall provide written technical requirements prior to the start of work or confirm work direction per this scope.

<u>Security -</u> No classified information is anticipated to be developed or exchanged under this CRADA Annex. Any information considered "For Official Use Only" in a business sense shall be identified by marking on each page prior to exchange (See section 8.3 of the Agreement). Disclosures between participants shall be in accordance with the CRADA. No data shall be exported, nor revealed to a foreign national without suitable export compliance (see 13.11 of the Agreement).

<u>Technical Meetings</u> – Meetings will be held as required. Telecons will be held bi-weekly or as required by New Horizons.

3.1 Program Management:

- 3.1.1 Program Execution and Control: Benet shall provide management and oversight to all program elements under the terms of the CRADA. Upon request, accounting of hours and funding expended on each particular task, meeting, topic shall be reported. Work shall proceed on a unit cost basis until funds are expended.
- 3.1.2 Schedule: Benet shall develop and maintain an Integrated Master Schedule of all activities under the terms of the CRADA.

3.2 System Engineering:

3.2.1 Requirements Development: Upon completion of key tests and recommendations, specific quantitative and qualitative technical requirements shall be developed. These requirements will establish a baseline of criteria to assess future developments and programs.

3.3 Technical Development and Assessment:

- 3.3.1 Sample Well Fluid Characterization: Benet shall generate an analysis of up to five (5) samples of well fluids (100 ml each) to assess the chemical makeup, suspended particulates, and the potential for corrosive impact.
- 3.3.2 Sample Rod Material Characterization: Benet shall generate an analysis of up to five (5) samples of sucker rod materials to assess the condition, physical damage, cracks, pits, corrosion and general condition of the rod. This will include Scanning Electron Microscope (SEM) analysis of the surface failure morphology, as well as analysis of the base material. Up to two(2) samples will be subjected to limited destructive testing to assess yield strengths and hardness.
- 3.3.3 Laboratory Physical Test Development: Benet shall generate an outline of possible laboratory tests that would duplicate the conditions experienced by the rods, and have the capability of assessing materials solutions. Specific output would address what existing organic lab equipment is available and what specific adaptations or equipment to complete the test set up would consist of.
- 3.3.4 Software Modeling of Rod Degradation Process: Benet shall generate an assessment of existing capabilities of our codes and establish what inputs, conditions, runtimes, and required empirical data would be required. Using the results of earlier specific well and rod analysis with a literature search, a profile of possible modeling results will be developed. Results shall provide a general outline of the process and the validation testing that would be required.

3.3.5 Alternative Development Process: Benet shall develop material and coating solutions based on our expertise and experience in harsh armament environments. Solutions should utilize our knowledge of thermo-chemistry, inputs from tasks 3.3.1 - 3.3.4, our access to state-of-the-art materials and coatings. General assessments of cost to process, heat treat or otherwise fabricate these solutions may be provided with respect to comparison to current processes used to fabricate sucker rods.

4. DELIVERABLES & SCHEDULE:

4.1 Telecon or Meeting Summary: Report addressing any contact conducted under the auspices of this agreement Report in subcontractor format

Due Date: As required.

4.2 Final Report: Report addressing all technical tasks, results and findings. Report shall specifically outline test plans and at least three (3) alternative approaches to reduce costs, improve durability or both. Report in subcontractor format addressing Tasks 3.3

Due Date: Preliminary TBD, Final TBD

5. POINTS OF CONTACT:

Benet – Integrated Product Team Leader David C. Smith 518-266-4741

Foundation – Executive Director E. Dale Gannaway, 575 492 4712

6. FUNDING SUMMARY:

6.1 Payment for work performed shall be made prior to any work commencing. The Foundation shall make an initial payment of \$25,000 upon execution of this AGREEMENT. Payments shall be made by check, made payable to <u>Defense Accounting Office</u>. Payments shall include a note referencing this CRADA and the office symbol, cost center, and Benet Point of Contact person (use attached CRADA Payment Attachment). Payments may be made by mail or hand delivery as described above, to:

DEPARTMENT OF THE ARMY RDAR-FMO Benet, Bldg. 40 (Attn: Keith Johnson) 1 Buffington Street Watervliet NY 12189-4000

6.2 <u>Insufficient and Excess Funds.</u> ARDEC shall not be required to continue its research and development activities under this SOW if the funds provided by the Foundation are insufficient to cover ARDEC's full cost for such continued activities. If ARDEC determines that funds provided by the Foundation are insufficient, ARDEC will so notify the Foundation prior to cessation of ARDEC's research and development activities so that appropriate funding adjustments can be made. Funds not expended by ARDEC shall be returned to the Foundation upon ARDEC's submission of a final fiscal report to the Foundation.

6.3 <u>Accounting Records</u> . ARDEC shall maintain separate and distinct current accounts, records, other evidence supporting all its expenditures under this SOW.					

CRADA PAYMENT ATTACHMENT Please fill out, sign, and attached this form with payment

Date:	·····			
MEMORANDUM FOR: R		RDAR-FMO/Bldg 40/Mr	. Keith Johnson	
		1 Buffington Street Watervliet NY 12189-40	00	
FROM:	Company: 1	New Horizons Foundation		
	City/State/Z	nnderbird Circle lip Hobbs, New Mexico 882 OC E. Dale Gannaway	240	
	Company Po	OC Phone Number: 575 492	2 4712	
CRADA en	Benet POC	l Sucker Rod Materials In Name: David C. Smith Phone Number: (518) 266-4	Ū	
1: Is this th	e Initial Fundin	g?	Yes x	No
2. Is this ar	Incremental Ir	crease to existing Project?	Yes	No <u>x</u>
3. Is this a	Master CRAD	A ?	Yes xx	No
4. If this is a	n Annex to a N	Saster CRADA, what is the A	Annex Number:	_1
5. What is th	ne Annex Title:	Oil Well Technology Devel	opment	
6. TOTAL A	AMOUNT OF (CHECK: \$25,000 Twenty Five	e Thousand Dollars	<u>s</u>
7. Tax ID N	umber:			
8. Additiona	ıl Clarifying Re	marks (if appropriate):		
		Dale Ganr	naway	(Signature)
		Executive	Director	(Title/Authority)

MULTI TASK DOMESTIC COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT

between

U.S. ARMY RESEARCH LABORATORY

and

NEW MEXICO JUNIOR COLLEGE RESEARCH FOUNDATION

doing business as

NEW HORIZONS FOUNDATION

ARL CRADA 15-58

	NEW HORIZONS FOUNDATION	U.S. ARMY RESEARCH LABORATORY	
	COLLABORATOR	ARL	
Legal POC	K. Lance Anderson	Alan Kalb	
w/ phone#	Office: 512-320-7200 7226	ARL Legal Counsel	
	Cell: 512-497-4007	301-394-1769	
	andersonl@gtlaw.com	alan.i.kalb.civ@mail.mil	
Administrative	Dale Gannaway	Thomas Mulkern	
POC	Office: 575-492-4712	Technology Transfer Office	
W/ phone#	Cell: 512-788-3650	410-278-0889	
20	dgannaway@nmjc.edu	thomas.j.mulkern.civ@mail.mil	
	Tim Wittig, alternate		
	202- 841-0655		
	wittigsall@aol.com		
Signatory	Dale Gannaway	Dr. Thomas P. Russell	
	Executive Director	Director	
	dgannaway@nmjc.edu	U.S. Army Research Laboratory	
Mailing	New Horizons Foundation	U.S. Army Research Laboratory	
Address	1 Thunderbird Circle	Technology Transfer Office	
	Hobbs, New Mexico. 88240	RDRL-DPP/T. Mulkern	
	http://nhfoundation.net/wp/	Bldg 321 RM 110	
		APG, MD 21005-5425	

TABLE OF CONTENTS

PARAGRAPH		PAGE No.
PREAMBLE		3
ARTICLE I:	GENERAL	3
ARTICLE II:	DEFINITIONS	3
ARTICLE III:	COOPERATIVE RESEARCH	5
ARTICLE IV:	REPORTS	7
ARTICLE V:	FINANCIAL OBLIGATION	7
ARTICLE VI:	TITLE TO PROPERTY	7
ARTICLE VII:	PATENTS	8
ARTICLE VIII:	COPYRIGHTS	11
ARTICLE IX:	TRADEMARKS	11
ARTICLE X:	EXCHANGE OF TECHNICAL DATA AND SOFTWARE	12
ARTICLE XI:	PROTECTED INFORMATION	12
ARTICLE XII:	PUBLICATIONS	14
ARTICLE XIII:	EXPORT CONTROL	14
ARTICLE XIV:	COMPETITIVENESS	15
ARTICLE XV:	TERMINATION	15
ARTICLE XVI:	DISPUTES	16
ARTICLE XVII:	LIABILITY	16
ARTICLE XVIII:	ENFORCEMENT	17
ARTICLE XIX:	MODIFICATION	18
ARTICLE XX:	ASSIGNMENT	18
ARTICLE XXI:	NOTICES	18
ARTICLE XXII:	ENDORSEMENT	18
ARTICLE XXIII:	DURATION OF AGREEMENT	18
ARTICLE XXIV:	ACCEPTANCE	19
APPENDIX A:	POINTS OF CONTACT	20

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT

PREAMBLE

The purpose of this agreement is to establish a cooperative research and development effort between the U.S. Army Research Laboratory (hereinafter referred to as "ARL") and New Mexico Junior College Research Foundation doing business as the New Horizons Foundation (NHF) (hereinafter referred to as ("COLLABORATOR") that involves research and development consistent with the military requirements of ARL and the technology goals of the COLLABORATOR.

Whereas the COLLABORATOR and ARL have agreed to mutually engage in a cooperative research and development effort, the COLLABORATOR and ARL do now therefore agree to the following terms and conditions set forth within this Cooperative Research and Development Agreement (CRADA), (hereinafter refer to as "AGREEMENT") which shall govern the conduct of all future efforts, as set forth in subsequent JOINT WORK STATEMENTS:

Article I: General

- 1.1 <u>Authority</u>: This AGREEMENT is entered into pursuant to the Federal Technology Transfer Act of 1986, (<u>Public Law No. 99-502</u>), as codified in <u>15 United States Code (U.S.C.) 3710a</u> and implemented by <u>Executive Order 12591 (10 April 1987</u>). This AGREEMENT is not a procurement contract, grant or cooperative agreement as those terms are used in <u>31 U.S.C. 6303</u>, 6304, and 6305.
- 1.2 ARL Representative: The person signing this AGREEMENT on behalf of ARL represents that he or she has authority to enter into this AGREEMENT subject to review in limited situations.
- 1.3 COLLABORATOR Representative: The person signing this AGREEMENT on behalf of COLLABORATOR represents that he or she has the authority to bind the COLLABORATOR to the terms of this AGREEMENT.
- 1.4 <u>No Violation</u>: The execution and delivery of this AGREEMENT does not contravene any material provision of, or constitute a material default under any material agreement binding on COLLABORATOR or ARL or any valid order of any court, or any regulatory agency or other body having authority to which COLLABORATOR or ARL is subject.

Article II: Definitions

2.1 <u>Computer Software or Software</u>: means computer programs, source code, source code listings, object code listings, designs, details, algorithms, processes, flow charts, formulae, and related material that would enable the software to be reproduced, recreated, or recompiled. Computer Software does not include computer databases or computer software documentation.

- 2.2 <u>Data</u>: means recorded information of any kind regardless of the form or method of the recording, including Technical Data and Computer Software.
- 2.3 Government: means the United States of America and the agencies thereof.
- 2.4 <u>Government Purposes</u>: means any activity in which the Government is a party, but does not include for commercial purposes.
- 2.5 <u>Government Purpose Rights</u>: means the right of the Government to use, duplicate, or disclose Data, in whole or in part, and in any manner, for Government Purposes only, and to have others do so for Government Purposes only. Government Purpose Rights includes competitive procurement, but do not include the right to have or permit others to use, duplicate or disclose Data for commercial purposes.
- 2.6 <u>Invention</u>: means any invention or discovery, which is or may be patentable or otherwise protected under U.S.C. Title 35 or any novel variety of plant, which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 7321 et seq.).
- 2.7 <u>Intellectual Property</u>: Means patents, copyrights, and other forms of comparable property rights protected by Federal law and foreign counterparts, except trade secrets and trademarks.
- 2.8 <u>Joint Subject Invention</u>: Means a Subject Invention Made jointly by employees of ARL and employees of COLLABORATOR in the performance of work under this AGREEMENT.
- 2.9 <u>Made</u>: Means, when used in conjunction with any Invention, the conception or first actual reduction to practice of the Invention.
- 2.10 Party or Parties: Means ARL and/or COLLABORATOR based upon usage.
- 2.11 <u>Proprietary Information</u>: Means information that embodies trade secrets exclusively developed at private expense, or business, commercial, or financial information that is privileged or confidential, provided that such information: (a) is not known or available from other sources without obligations concerning its confidentiality; (b) has not been made available by the owners to others without obligation concerning confidentiality; (c) is not already available to the Government without obligation concerning its confidentiality; and (d) has not been developed independently by persons who have had no access to the information.
- 2.12 <u>Protectable Invention Information</u>: Means information about an Invention in which the Government owns or may own a right, title, or interest, and that are subject to confidentiality under 35 U.S.C. 205 for a reasonable time in order for a patent application to be filed.
- 2.13 <u>Restricted Access Information</u>: Means Subject Data generated by the Government that would be Proprietary Information if the information had been obtained from a non-Federal collaborator participating in a CRADA. Under 15 U.S.C. 3710a(c)(7)(B) the parties mutually may agree to provide appropriate protection to Subject Data generated by the Army against public dissemination or release under the Freedom of Information Act (FOIA) for a period of up to five (5) years after development of the Subject Data.

- 2.14 <u>Subject Data</u>: Means recorded information first produced in performance of this AGREEMENT. Subject Data includes both Technical Data and Computer Software. The term does not include Data incidental to the administration of this AGREEMENT, such as financial or management information.
- 2.15 <u>Subject Invention</u>: Means any Invention Made in the performance of work under this AGREEMENT.
- 2.16 <u>Technical Data</u>: Means recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer software documentation and databases). The term does not include Computer Software or Data incidental to the administration of this AGREEMENT, such as financial or management information.
- 2.17 <u>Unlimited Rights</u>: Means the right to use, modify, reproduce, release, disclose, perform, or display Technical Data or Computer Software in whole or in part, in any manner and for any purpose whatsoever, and to have or permit others to do so.
- 2.18 Vehicular Applications: Means use of Subject Inventions for the suppression of sound generated by engines of various kinds used to propel vehicles.

Article III: Cooperative Research

- 3.1 <u>Joint Work Statement (JWS)</u>: Cooperative research and development efforts under this AGREEMENT shall be performed in accordance with this Joint Work Statement (hereinafter referred to as "JWS"). ARL and COLLABORATOR will participate in this cooperative effort and utilize such personnel, facilities, equipment, know-how, and information consistent with the JWS and their own policies.
- 3.2 <u>Scope</u>: The parties mutually recognize that the extent of the technical scope of the AGREEMENT purpose cannot be rigidly defined in advance. As such, no specific minimum or maximum limit is set with regards to either ARL's or the COLLABORATOR's involvement, including personnel, facilities, equipment, know-how, information nor any other resource. ARL and the COLLABORATOR will estimate the level of effort of each Party for each distinct cooperative research and developmental project in a separate approved JWS.
- 3.3 <u>Points of Contact</u>: The principal Points of Contact for ARL and COLLABORATOR are as set forth below in Appendix A. In addition, if required, ARL, through its Subordinate ARL elements (its Federal Laboratories), and COLLABORATOR shall identify Principal Investigators under this AGREEMENT in the JWS.
- 3.4 <u>JWS Changes</u>: Each Party may suggest changes to the scope and direction of the cooperative effort and the JWS. The parties shall make a good faith effort to agree to any changes consistent with the basic scope of research set forth in the JWS. Modifications will be made in accordance with Article XIX, paragraph 19.2 of this AGREEMENT.
- 3.5 <u>Review of Work</u>: ARL and COLLABORATOR will hold periodic conferences to review the CRADA progress. The parties agree that the general exchange of information pursuant to

this AGREEMENT is not a "collection of information" as defined at 44 U.S.C. 3502(3) and, therefore, that this CRADA is not subject to the requirements of the Paperwork Reduction Act (44 U.S.C. §§ 3501 et seq.).

- 3.6 <u>Joint Technical Effort</u>: ARL and COLLABORATOR agree to establish a joint research and development team (hereinafter the "Team") that shall conduct the research outlined in the JWS. The nature of this cooperative effort is such that completion of this effort within the period of performance specified or the resources planned cannot be guaranteed. Accordingly, each Party pledges to support the Team in a mutually cooperative manner, and on a reasonable best effort basis.
- 3.7 <u>Staff Rotation</u>: An important element of CRADA collaboration is the rotation of technical staff through short- and long-term temporary assignments. If called for, the scope of this collaboration may range from regular, periodic short temporary duty lasting a year or more. Staff rotations will be undertaken to foster and facilitate collaborative research where face-to-face interaction is advantageous, to enable a researcher to utilize unique facilities, to enable ARL and COLLABORATOR personnel to obtain specialized experience and to facilitate the exchange of research results. In addition, this exchange of personnel will provide COLLABORATOR personnel with insight into Army unique requirements and will provide Government personnel with insight into state of the art research and commercial practices and/or the opportunity to pursue fundamental research with noted researchers. The success of these interactive and collaborative exchanges will be assessed by the quality of the collaboration as demonstrated by joint efforts such as basic research transitions to applied research programs, archival journal papers, patents, and refereed presentations. The Parties shall participate in CRADA in accordance with the JWS, which sets forth the specific goals and objectives for the program for each program period.
 - 3.7.1 <u>Salary and Travel Costs</u> All salary and travel costs associated with the rotation of government personnel will be borne by the Government. All salary and travel costs associated with staff rotation of COLLABORATOR personnel will be paid for by COLLABORATOR.
 - 3.7.2 <u>Host Facility Regulations</u> Both parties' personnel in rotational assignments or onsite collaboration are required to comply with the safety, environmental, security, and operational regulations or requirements of the host facility.
 - 3.7.3 <u>Administrative Support</u> The host facility will provide adequate office space, communications connections, administrative support, and office supplies, if available, for guests on rotational assignments
- 3.8 <u>Independent Parties</u>: The relationship of COLLABORATOR and ARL to this AGREEMENT is that of independent Parties and not as agents of each other or as a joint venture. ARL shall maintain sole and exclusive control over its personnel and operations. COLLABORATOR shall maintain sole and exclusive control over its personnel and operations.

Article IV: Reports

4.1 <u>Progress and Other Reports</u>: The Parties shall prepare and exchange written reports in accordance with the JWS regarding their cooperative effort to include: results obtained, problems encountered, expenditure of funds, if applicable, and recommendations for further efforts. Any progress report shall be prepared subject to the joint supervision of the Parties; each shall make their own independent judgment regarding the advancements.

Article V: Financial Obligation

- 5.1 <u>ARL</u>: shall not provide any Federal funds to the COLLABORATOR under this AGREEMENT.
- 5.2 NHE: shall fund all of its own activities under this AGREEMENT, and in addition, COLLABORATOR agrees to reimburse ARL to the extent provided in this paragraph and in subsequent JWS. COLLABORATOR certifies that all funds either used by COLLABORATOR to perform its activities under this AGREEMENT or transferred from COLLABORATOR to ARL are not from an existing U.S. Government funding agreement.
- 5.3 <u>Payment</u>: In circumstances where funding is due to ARL from the COLLABORATOR, a check or U.S. Postal Money Order, payable to the "Treasurer of the United States" with reference to this agreement and mailed to: "U.S. Army Research Laboratory, Technology Transfer Office, RDRL-DPP/Thomas Mulkern, Bldg 321 RM 110, APG MD 21005-5425"

Article VI: Title to Property

- 6.1 <u>Title to Preexisting or Acquired Tangible Property</u>: Each Party shall retain title to all tangible property to which it had title prior to the effective date of this AGREEMENT or to which it acquired or acquires title, by purchase or by fabrication, outside of the scope of this AGREEMENT. Consumable property to be used pursuant to this AGREEMENT shall remain the property of the original owning Party until consumed.
- 6.2 <u>Title to Developed Property</u>: All tangible property fabricated or acquired under this AGREEMENT with all components provided by one Party shall remain the property of that Party. Tangible property having any component purchased or supplied by the Government shall be the property of the Government, unless such tangible Government components reasonably can be separated from non-Government components without damage to any of the individual components comprising the tangible property. After termination of this AGREEMENT, the Parties may, by mutual consent, separate the tangible property into its components and the separated components shall remain the property of the Party that originally acquired or fabricated same.
- 6.3 <u>Tangible Property Operational and Disposition Costs</u>: Each Party shall be responsible for all costs of maintenance, removal, storage, repair, disposal and shipping of all tangible property to which it has title.

6.4 <u>Disposal of Tangible Property</u>: Unless otherwise agreed, each Party shall take possession of its respective tangible property within sixty (60) days of termination of this AGREEMENT or related JWS, whichever occurs first. Each Party shall cooperate with the other Party in the recovery or disposition of the other Party's property.

Article VII: Patents

7.1 <u>Background Inventions</u>: This AGREEMENT does not grant any implied licenses for practicing background inventions in the performance of work outside of this AGREEMENT. However, as to work performed under this AGREEMENT in accordance with the JWS, the Parties agree to refrain from asserting any claims of patent infringement or other violations of Intellectual Property rights which the Parties own or control.

7.2 Reporting

- 7.2.1 Annual Report of Subject Inventions: Each Party shall provide to the other Party an annual report every twelve (12) months from the effective date of the JWS, listing all Subject Inventions made under the JWS during the term of the JWS. The annual report shall also represent that all Subject Inventions have been reported or that there were no Subject Inventions for that period.
- 7.2.2 <u>Detailed Disclosure of Subject Inventions</u>: Each Party shall prepare a written disclosure of each Subject Invention made by its employee(s), in sufficient detail to convey a clear understanding of the Invention. Each Party shall provide a copy of the detailed disclosure to the other Party by the earliest of: (a) two (2) months after receiving a completed disclosure from its employee(s); or (b) six (6) months after the Party first becomes aware that a Subject Invention has been made by its employee(s). In the case of joint inventorship, unless the Government agrees otherwise, it shall be the responsibility of the COLLABORATOR to prepare and provide the detailed disclosure as described above, and the non-preparing Party shall cooperate fully in the preparation of the detailed disclosure.
- 7.3 ARL Subject Inventions: ARL, on behalf of the Government, shall retain title to each Subject Invention Made by its employees. ARL has the first right to file patent applications on these Subject Inventions at its own expense. ARL grants to Collaborator a nonexclusive, paid-up, irrevocable nontransferable worldwide license to practice or have practiced by or on behalf of COLLABORATOR ARL Subject Inventions. Such nonexclusive license shall be evidenced by a Confirmatory License Agreement provided by each party in a form acceptable by the other party.
- 7.4 <u>Collaborator Subject Inventions</u>: COLLABORATOR shall retain title to each Subject Invention Made by its employees. COLLABORATOR has the first right to file patent applications on these Subject Inventions at COLLABORATOR's own expense. In accordance with 15 U.S.C. 3710a(b)(2), the COLLABORATOR grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced throughout the world by or on behalf of the Government for Government research or other Government Purposes Subject Inventions made under this AGREEMENT by COLLABORATOR and

COLLABORATOR's employees. Such nonexclusive license shall be evidenced by a Confirmatory License Agreement provided by each party in a form acceptable by the other party.

Further, COLLABORATOR agrees to secure, for the Government, rights in any inventions Made by other entities in performing work called for by this CRADA for the benefit of COLLABORATOR. The rights to be secured by COLLABORATOR for the Government in such circumstance shall be the same rights which would inure to the Government if such inventions were Subject Inventions under this Agreement. Such rights shall be evidenced by a confirmatory license agreement prepared by COLLABORATOR using a form acceptable to both parties.

7.5 Joint Subject Inventions: Title to Subject Inventions made jointly by employees of ARL and COLLABORATOR shall be held jointly by the Government and COLLABORATOR. COLLABORATOR shall have the initial option to file patent applications on joint Subject Inventions at its own expense. If COLLABORATOR declines to file or complete prosecution of such patent applications, COLLABORATOR waives co-ownership interest and agrees to assign its title to such joint Subject Inventions to the Government for those countries where it declines to file or complete prosecution.

7.6 Filing of Patent Applications

- 7.6.1 First Rights Party: The Party having the right to retain title and/or file patent applications on a specific invention, hereinafter "First Rights Party", may elect to file patent applications thereon provided it so advises the other Party within sixty (60) days from the date it discloses the Subject Invention to the other Party, but see 7.6.3. Any election NOT to file a patent application shall also be conveyed, in writing, by the same date. In the event that the First Rights Party fails to advise the other Party of its intent to file patent applications and in what countries it intends to file within ninety (90) days from the date it reports the Subject Invention, the other Party may elect to file patent applications on such Subject Invention in those countries for which an affirmative election has not been timely made.
- 7.6.2 Failure to File: The First Rights Party shall file within six (6) months from the date it discloses the Subject Invention to the other Party, or one (1) month before any statutory bar date, if same is earlier. If the First Rights Party fails to file within six (6) months from the date it discloses the Subject Invention to the other Party, or at least one month before a statutory bar date, fails to provide assurance of filing before the statutory bar date, the other Party may elect to file patent applications on such Subject Invention in those countries where a patent application has not been timely made or assured. For purposes of this paragraph, the filing of a U.S. Patent application qualifying as a priority document for filing of an International Patent Application under the Patent Cooperation Treaty (PCT) shall be deemed a timely application filing in PCT signatory countries.
- 7.6.3 Written Notice: If the First Rights Party elects not to file a PCT application, elects not to designate all PCT countries, or elects not to enter the national phase in any PCT signatory country and elects not otherwise to pursue patent rights in all

- countries, the First Rights Party shall provide written notice to the other Party not less than ninety (90) days before the expiration of the applicable deadline for filing, designation, or entry of national phase. In such an event, the other Party may elect to file the application or continue the prosecution.
- 7.6.4 Other Party Rights: If the other Party elects to file a patent applications First Rights Party agrees to assign to the other Party its rights, title and interest in such patent rights and to cooperate with the other Party in the preparation and filing of patent applications. The assignment of the above rights to the other Party shall be subject to the retention by the First Rights Party of a royalty-free, nonexclusive, irrevocable license to practice or have practiced the Subject Invention worldwide by or on behalf of that Party (limited to Government Purposes only, if First Rights Party is ARL). Where both Parties will be filing or prosecuting an application in different countries, the assignment shall reflect this distinction of rights by jurisdiction.
- 7.6.5 <u>U.S. Inventions</u>: To avoid potential deemed or actual export of information subject to the International Traffic in Arms Regulations or other export control laws, the Parties agree that any patent application for an invention first made in the United States will be first filed in the United States as a U.S. domestic (not PCT) patent application.
- 7.7 Patent Expenses and Cooperation: The expense attendant to the filing of patent applications as specified above shall be borne by the Party filing the patent application. Each Party shall provide the other Party with a copy of each patent application (and subsequent prosecution documents upon request by the other Party) it files in the U.S. Patent and Trademark Office or any foreign patent offices, along with the power to inspect and make copies of all documents retained in the official patent application files by the applicable patent offices. Copies so obtained will by their nature be unmarked. Such copies will be presumed protected until verified otherwise. The Party filing the patent application shall have the right to control the prosecution of the application. The Parties agree to cooperate with each other in preparing and prosecuting patent applications.
- 7.8 <u>Maintenance Fees</u>: At its option, the Party filing the patent application will pay all patent maintenance fees to the U.S. Patent and Trademark Office; or, if a foreign patent issues, pay annuities to any foreign patent offices, respectively in order to maintain the patent's enforcement. If that Party decides not to pay maintenance fees or annuities, it shall notify the other Party, who may pay the maintenance fees or annuities if it desires to maintain the enforcement of the patent. The notification shall be given sixty (60) days or more prior or after the maintenance fee payment window has opened. If one Party decides not to pay such maintenance fees or annuities, and the other Party elects to pay such maintenance fees or annuities, the first Party will assign title to the patent to the other Party ready and able to pay such maintenance fees or annuities.
- 7.9 <u>Licensing of Subject Inventions</u>: ARL agrees, in return for COLLABORATOR agreement to pay for the filing and prosecution of each licensed Subject Invention as per terms outlined in ATTACHEMT 1 to license Subject Inventions to COLLABORATOR when requested..

- 7.9 <u>Assignment and Transfer:</u> Unless specifically stated otherwise in the licensing agreement, COLLABORATOR agrees that any nontransferable license granted to COLLABORATOR by the Government pursuant to this Article may not be assigned, sublicensed, or otherwise disposed of without prior notification to the Government and receipt of Government approval. Such approval to not be unreasonably withheld or delayed.
- 7.10 Government Retained Rights: The Parties acknowledge the rights of the Government in any invention which has been assigned or exclusively licensed to COLLABORATOR under 15 U.S.C. §3710(a)(b)(1)(B) and (C).

Article VIII: Copyrights

- 8.1 Works Created Solely by Collaborator: COLLABORATOR retains all ownership to copyrights for original works of authorship created solely by COLLABORATOR's employees (or for hire by COLLABORATOR) in the course of performance of work under this AGREEMENT. COLLABORATOR grants to the Government a royalty-free, nonexclusive, irrevocable license to use, modify, prepare derivative works, reproduce, distribute, perform, and display worldwide such copyrighted works by or on behalf of the Government for Government Purposes.
- 8.2 <u>Jointly Created Works</u>: Ownership of copyrights for original works of authorship created jointly by ARL employees and COLLABORATOR's employees (or for hire by COLLABORATOR) in the course of performance of work under this AGREEMENT is vested in COLLABORATOR. COLLABORATOR grants to the Government a royalty-free, nonexclusive, irrevocable license to use, modify, prepare derivative works, reproduce, distribute, perform, and display worldwide such copyrighted works for Government Purposes only. COLLABORATOR agrees to share revenues in jointly created works with ARL at reasonable rates, terms, and conditions agreed upon by the Parties.
- 8.3 Works Created Solely by ARL: Pursuant to 17 U.S.C. § 105, copyright protection in the United States is not available for works of the Government.
- 8.4 <u>Copyright Statement:</u> COLLABORATOR shall include the following statement on any text, drawing, mask work or other work of authorship, that may be copyrighted under 17 USC, that is created in the performance of this AGREEMENT:
- "The U.S. Government has a Government Purposes copyright license in this work pursuant to a Cooperative Research and Development Agreement with New Horizons Foundation.

Article IX: Trademarks

9.1 COLLABORATOR and ARL agree to negotiate in good faith Trademark licensing agreements when requested by the other Party. A Party intending to claim or assert a trademark with respect to the subject of this AGREEMENT shall provide the other Party immediate notice of such intent.

Article X: Exchange of Technical Data and Software

- 10.1 Exchange of Data: Unless prohibited by law or regulation, the Parties agree to exchange all Subject Data relevant to the performance of this AGREEMENT. Absent actual knowledge to the contrary, information that is not marked as being protected in accordance with the terms of this AGREEMENT, shall be presumed to be unprotected and releasable.
- 10.2 Any data and/or software the Collaborator exchanges with ARL that has restrictive markings or legends affixed thereto pursuant to and authorized by any previous or existing funding agreement, as that term is defined in 35 U.S.C. 201, shall be handled by ARL in accordance with the funding agreement, the FAR, DFARS and any other applicable regulations. Once notified by ARL, restrictive markings not in a format authorized by the FAR, DFARS or Collaborator funding agreement must be removed or corrected by Collaborator within 60 days or ARL may ignore any nonconforming marking.
- 10.3 <u>Software</u>: To the extent not otherwise governed by the Articles on Patents and Copyrights, the developing Party will provide the other Party with the executable code, and minimum support documentation needed by a competent user to use Software created in performance of work under this AGREEMENT.

Article XI: Protected Information

11.1 Exchange of Data: Either Party may make any use of any Subject Data of the other Party as it requires for purposes of fulfilling its responsibilities under the AGREEMENT, subject to export control requirements and the Government's right to designate materials as classified. Where the Government wishes to make a non-public disclosure to a third party of Data designated as Proprietary Information, the Government will first require the proposed third party recipient to execute a Non-Disclosure Agreement, in a form acceptable to COLLABORATOR, limiting the recipient's use to be for sole purpose of fulfilling its reasonability under this agreement. Such approval not to be unreasonably withheld or delayed. Absent actual knowledge to the contrary, Data that is not marked as being protected in accordance with the terms of this AGREEMENT, shall be presumed to be unprotected and releasable to which both Parties will have Unlimited Rights.

11.2 Protected Data

11.2.1 Form: Collaborator shall place a proper proprietary marking on each medium used for recording Data that Collaborator delivers to ARL under this AGREEMENT that Collaborator asserts is Proprietary Information. Collaborator shall request in writing if it wishes Subject Data generated by ARL to be marked as Restricted Access Information. The Parties together shall confer to determine if such marking is appropriate, with reference to the definitions in Article II entitled "Definitions."

Proprietary Information may be disclosed to the other Party orally, electronically, visually, in writing, or in any other tangible or intangible form. If the Proprietary Information is initially disclosed in a non-fixed media, then the Party disclosing

- the information shall furnish the other Party with the information in a fixed medium marked appropriately and within thirty (30) days of its initial disclosure. Failure to furnish the fixed medium within thirty (30) days, or to prominently mark the information as proprietary or otherwise protected, will not automatically result in the loss of the information's protected status. However, such action will excuse any Party's unauthorized disclosure or use of the information caused by the failure to meet the thirty (30) day period to properly mark the information.
- 11.2.2 Collaborator Non-Subject Data: Collaborator shall place a proprietary marking on all Non-Subject Data it asserts as Proprietary Information that is furnished to ARL. The markings shall prominently and explicitly identify which Non-Subject Data is Proprietary Information and which Non-Subject Data is not Proprietary Information. Such marked Data, as long as it remains protected, shall not be disclosed or otherwise made available by ARL outside the Parties without the written consent of COLLABORATOR. For Non-Subject Data that are Proprietary Information, the marking shall read:
 - "PROPRIETARY INFORMATION OF NEW HORIZONS FOUNDATION GOVERNMENT HAS RIGHT TO AND WILL PROTECT IN ACCORDANCE WITH ARL CRADA NUMBER (15-58)"
- 11.2.3 Collaborator Subject Data: Collaborator shall place a proprietary marking on all Subject Data it asserts as Proprietary Information that is furnished to ARL. The markings shall prominently and explicitly identify which Subject Data is Proprietary Information and which Subject Data is not Proprietary Information. For Subject Data that are Proprietary Information the marking shall read:
 - "PROPRIETARY INFORMATION OF NEW HORIZONS FOUNDATION GOVERNMENT HAS GOVERNMENT PURPOSE RIGHTS AND WILL PROTECT IN ACCORDANCE WITH ARL CRADA NUMBER (15-58)"
- 11.2.4 Government Non-Subject Data and Protectable Invention Information: ARL shall place a nondisclosure marking on all Non-Subject Data that is Proprietary Information or Protectable Invention Information and furnished to Collaborator. The markings shall prominently and explicitly identify which Non-Subject Data is Proprietary Information or Protectable Invention Information and which Non-Subject Data is not Proprietary Information or Protectable Invention Information. Such marked Data, as long as it remains protected, shall not be disclosed or otherwise made available by Collaborator outside the Parties without the written consent of ARL.
 - "DATA PROTECTED FROM RELEASE OR DISCLOSURE UNDER 35 U.S.C. 205 AND/OR 5 U.S.C. CHAPTER 5, SUBCHAPTER II IN ACCORDANCE WITH ARL CRADA NUMBER (15-58)"
- 11.2.5 Government Subject Data: ARL shall place a nondisclosure marking on all Subject Data agreed to by the Parties to be protected as "Restricted Access

Information." For Government Subject Data that are Restricted Access Information the marking shall read:

"RESTRICTED ACCESS INFORMATION – GOVERNMENT HAS GOVERNMENT PURPOSE RIGHTS AND WILL PROTECT IN ACCORDANCE WITH ARL CRADA NUMBER (15-58) UNTIL 5 YEARS AFTER THE INFORMATION HAS BEEN DEVELOPED AND THEREAFTER SHALL HAVE UNLIMITED RIGHTS."

- 11.2.6 <u>Standard of Care</u>: Each Party is obligated to use not less than reasonable care in the protection of properly marked data.
- 11.2.7 <u>Disputes Disagreements:</u> Between the Parties regarding the appropriate marking for Data shall be resolved in accordance with Article XVI Disputes. Resolution of such disagreements shall give priority to implementing all the rights and licenses contained within this AGREEMENT.

Article XII: Publications

12.1 Each Party desiring to publish information or press releases pertaining to work performed under this AGREEMENT shall submit to the other Party any proposed written or oral publications not less than thirty (30) days prior to submission for publication. If they have any objection to the publication, the Party receiving the proposed publication shall, provide a written response within thirty (30) days. A proposed publication that contains information marked protected by either Party requires an affirmative consent by both Parties in order to release the publication. Such consent will not be unreasonably withheld or delayed.

Article XIII: Export Control

- 13.1 Fundamental Research Limitation: The research developed and delivered by the COLLABORATOR under this agreement, including all data, inventions, discoveries, copyrightable works, software, tangible materials and information, will be confined to "fundamental research" as defined by ITAR and EAR regulations (collectively, "Export Control Regulations") and will therefore not be restricted under the Commerce Control List of the Export Control Regulations or the US Munitions List of the International Traffic in Arms Regulations. Further, faculty and/or students which qualify as "foreign persons" shall not be restricted from participating in these research efforts pursuant to this agreement should therefore not be subject to Export Control. Should ARL believe at some point in this collaborative project that materials which are being developed pursuant to this agreement are deemed "export controlled", ARL must provide specific information to the COLLABORATOR Administrative Contact as to the regulation under which the materials are classified as "controlled". The parties may terminate the agreement for convenience if the COLLABORATOR is unable to perform the type of project ARL requires.
- 13.2 <u>Compliance with Export Control</u>: This AGREEMENT is subject to United States laws and regulation controlling the export of technical data; computer software, laboratory prototypes and

all other export controlled commodities. These laws include, but are not limited to the Arms Export Control Act and Export Administration Act as they may be amended. All rights granted by this AGREEMENT are contingent upon compliance with these laws and regulations. COLLABORATOR shall not, directly or indirectly, export any export controlled commodities, which are subject to this AGREEMENT, unless the required authorization and/or license is obtained from the required Government agency(ies) prior to export. COLLABORATOR shall notify ARL in writing 30 days prior to of its intent to obtain an export license for technologies and/or equipment resulting under this AGREEMENT. By granting rights in this AGREEMENT, ARL does not represent that export authorization or an export license will not be necessary or that such authorization or export license will be granted.

The COLLABORATOR agrees to report within the JWS, all COLLABORATOR foreign nationals employees that will conduct research described within that JWS under this AGREEMENT, unless the work is to be limited to fundamental research as defined in 15 CFR 734.8. COLLABORATOR agrees to abide by the terms and conditions of paragraph 13.1 of this AGREEMENT should COLLABORATOR employ non-resident aliens to conduct the work described in the JWS under this AGREEMENT.

13.3 <u>Classified Data</u>: The work performed under this AGREEMENT may cover classified national security information and unclassified Military Critical Technology (MCT). All personnel, government and non-government, working with classified material must have an appropriate security clearance and need to know. Any exchange of classified data with industry shall comply with the National Industrial Security Program Operating Manual, DoD 5200.22-M (February 2006) and the DD-254, DoD Contract Security Classification Specification provided as a separate removable attachment to this AGREEMENT. If required, the COLLABORATOR must also be certified by the Joint Certification Program (JCP) to receive MCT and technical data governed by DoD Directive 5230.25. This data must be controlled in accordance with the International Trade in Arms Regulations (ITAR).

Article XIV: Competitiveness

14.1 <u>Recognizing the Government's preference:</u> to enter into Cooperative Research and Development Agreements with businesses that will enhance U.S. competitiveness, as promulgated in 15 U.S.C. 3710a (c)(4), COLLABORATOR agrees that any products embodying inventions made under this AGREEMENT or produced through the use of such inventions shall be manufactured normally in the United States.

Article XV: Termination

- 15.1 <u>Mutual Consent</u>: COLLABORATOR and ARL may terminate this AGREEMENT at any time by mutual consent.
- 15.2 <u>Unilateral Action</u>: Either Party may unilaterally terminate this AGREEMENT by giving the other Party written notice, not less than thirty (30) days prior to the desired termination date. Pending termination pursuant to this Article, the Parties agree that performance of work under this AGREEMENT shall continue diligently in accordance with the JWS.

- 15.3 <u>Termination Costs</u>: Unless otherwise explicitly provided in this AGREEMENT, each Party shall be solely responsible for all of the costs it has incurred under this AGREEMENT through the effective date of termination as well as any costs it incurs after the effective date of termination.
- 15.4 <u>Disposition</u>: Upon termination, the Parties shall specify the disposition of property, inventions, and other results of work accomplished or in progress, under this AGREEMENT, if such disposition is not otherwise specified.

Article XVI: Disputes

- 16.1 <u>Settlement</u>: Any disputes arising under this AGREEMENT that are not disposed of by agreement of the Parties, shall be submitted jointly to the signatories of this AGREEMENT. A joint decision of the signatories or their designees shall be the disposition of such disputes. The Parties may use alternative disputes resolution (ADR) techniques to resolve disputes brought to their attention; however, nothing in this AGREEMENT precludes either Party from pursuing resolution of a dispute by other means.
- 16.2 <u>Continuation of Work</u>: Pending dispute resolution pursuant to this Article, the Parties agree that performance of work under this AGREEMENT shall continue diligently in accordance with the JWS.

Article XVII: Liability

- 17.1 No Warranty: The Parties make no express or implied warranty as to the conditions of the research, inventions, technical data, or products exchanged, made, or developed under this AGREEMENT, or the ownership, merchantability, or fitness for a particular purpose, technical feasibility, or freedom from infringement of intellectual property rights of the research, inventions, technical data, or products. Neither Party shall be liable for lost profits, lost savings, special, consequential, incidental, or other indirect damages, even if such Party is made aware of the possibility thereof.
- 17.2 <u>Products Liability</u>: To the extent not specifically prohibited by applicable State or local law or provided in appropriations, COLLABORATOR agrees to indemnify and hold harmless, the Government for any loss, claim, damage, expense, or liability of any kind brought by a third party occurring as a result of the making, using, or selling of a product, process, or service by or on behalf of the COLLABORATOR, its assignees and licensees, which was derived from work performed under this AGREEMENT. In respect to this provision, the Government shall not be considered an assignee or licensee of the COLLABORATOR as a result of reserved Government rights under this CRADA. The Government's liability for losses, claims, damages, or expenses of the COLLABORATOR occurring as a result of the making, using, or selling of a product, process, or service by or on behalf of the Government shall be governed by the provisions of the Federal Tort Claims Act.
- 17.3 <u>Parties' Employees</u>: To the extent not specifically prohibited by applicable State or local law or provided for in appropriations, the COLLABORATOR shall indemnify and hold harmless

the Government for any loss, claim, damage, expense, or liability of any kind involving an employee of the COLLABORATOR arising in connection with the performance of work under this AGREEMENT, except to the extent that such loss, claim, damage, or liability arises from the negligence of the ARL or its employees. The Government's liability 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 AGREEMENT shall be governed solely by the Federal Tort Claims Act.

- 17.4 <u>Notice and Assistance</u>: The indemnification provisions of this Article shall apply only if the U.S. Army Research Laboratory upon which the claim or lawsuit is asserted gives the COLLABORATOR prompt notice of the claim or lawsuit and allows the COLLABORATOR to participate in the defense/adjudication of the claim or lawsuit as is permitted by applicable laws and Government regulations.
- 17.5 Force Majeure Events: Neither Party shall be liable for any unforeseen event beyond its reasonable control not caused by the fault or negligence of such Party, which causes such Party to be unable to perform its obligations under this AGREEMENT and which it has been unable to overcome by the exercise of due diligence. Such unforeseen events include, but are not limited to, fire, storm, flood, earthquake, or other natural catastrophes, accidents, acts of civil disturbance or disobedience, war, acts of terrorism, rebellion, insurrection, labor strikes or disputes, compliance with any laws, requirements, rules, regulations, or orders of any governmental authority or instrumentality thereof, sabotage, invasion, quarantine, and embargoes.

Article XVIII: Enforcement

- 18.1 <u>Governing Law</u>: The laws applicable to the Federal Government of the United States of America shall govern the construction, validity, performance, and effect of this AGREEMENT for all purposes. COLLABORATOR will be subject to any Federal, State, or Local laws governing their activities under this AGREEMENT.
- 18.2 <u>Headings</u>: Titles of the Articles and Sub-articles of this AGREEMENT are for convenience and reference only, and shall in no way affect the interpretation thereof.
- 18.3 <u>Waivers:</u> None of the provisions of this AGREEMENT shall be considered waived by any Party hereto, unless such waiver is given in writing to the other Party. The failure of any Party to insist upon strict performance of any of the terms and conditions hereof, or a failure or a delay in exercising any rights provided herein or by law, shall not be deemed a waiver of any rights of such Party.
- 18.4 <u>Provisions Contrary to Law</u>: Any AGREEMENT provision that is prohibited by law is void and shall not impair, affect, or invalidate the other provisions of this AGREEMENT.

27 OCT 2015

Article XIX: Modification

- 19.1 Entire Agreement: This AGREEMENT constitutes the entire agreement between the Parties concerning the subject matter hereof and supersedes all prior representations or agreements relating hereto, which have been merged into this document and are superseded in totality by this AGREEMENT. This AGREEMENT shall not be used to alter or interpret the provisions or clauses of any other contract or agreement.
- 19.2 <u>Agreement Modification</u>: If either Party desires to modify this AGREEMENT, and upon giving reasonable notice of the proposed modification by the Party desiring the modification, the Parties shall confer in good faith to determine the desirability of such modification. Such modification shall take effect upon a written amendment being signed by all the Parties hereto by their duly authorized representatives.

Article XX: Assignment

20.1 Neither this AGREEMENT nor any rights or obligations of any Party hereunder may be assigned or transferred without the prior written consent of the other Party. Such consent shall not be unreasonably withheld or delayed.

Article XXI: Notices

21.1 All notices pertaining to this AGREEMENT shall be in writing and shall be signed by an authorized representative of the Party giving notice. Notices shall be sent by certified mail, return receipt requested, with postage prepaid, express mail, or private delivery service and addressed to the Administrative POC at the Mailing address as defined in Appendix A.

Article XXII: Endorsement

22.1 Neither ARL nor the Government directly or indirectly endorse any product or service provided, or to be provided by the COLLABORATOR, its successors, assignees, or licensee. The COLLABORATOR shall not in any way imply that this AGREEMENT is an endorsement by the Government of any such product or service.

Article XXIII: Duration of Agreement

- 23.1 <u>Duration</u>: In no case will this AGREEMENT extend beyond three (3) years unless revised in accordance with Article XIX, Paragraph 19.2 of this AGREEMENT.
- 23.2 <u>Effective Date</u>: The effective date of this AGREEMENT shall be the date of the last signature subject to Article I. Paragraph 1.2.
- 23.3 <u>Continuing Obligation</u>: All AGREEMENT obligations and rights specified in <u>Articles VI. VII. VIII. IX. XI. XII. and XVII</u> shall survive the termination or expiration of this AGREEMENT.

Article XXIV: Acceptance

IN WITNESS THEREOF, the parties hereto have caused this **AGREEMENT** to be executed by their duly authorized representatives.

NEW HORIZONS FOUNDATION	U.S. ARMY RESEARCH LABORATORY
Dale Gannaway Executive Director New Horizons Foundation	BY: Dr. Thomas P. Russell Director, U.S. Army Research Laboratory
Date: 11.13.2016	Date:

APPENDIX A: Points of Contact

	NEW HORIZONS FOUNDATION)	U.S. ARMY RESEARCH LABORATORY
ACRONYM	COLLABORATOR	ARL
Technical POC w/phone # (if applicable)	Dale Gannaway Office: 575-492-4712 Cell: 512-788-3650 dgannaway@nmjc.edu Tim Wittig 202-841-0655 wittigsall@aol.com	Michael V. Scanlon US Army Research Laboratory (RDRL-SES-P) Phone: 301-394-3081 michael.v.scanlon2.civ@mail.mil
Legal POC w/ phone#	K. Lance Anderson Office: 512.320.7200 7226 Cell: 512.497.4007 andersonl@gtlaw.com	Alan Kalb ARL Legal Counsel 301-394-1769 alan.i.kalb.civ@mail.mil
Administrative POC W/ phone#	Dale Gannaway Office 575-492-4712 Cell 512-788-3650 dgannaway@nmjc.edu	Thomas Mulkern Technology Transfer Office 410-278-0889 thomas.j.mulkern.civ@mail.mil
Signatory	Dale Gannaway Executive Director dgannaway@nmjc.edu	Dr. Thomas P. Russell Director U.S. Army Research Laboratory
Mailing Address	New Horizons Foundation 1 Thunderbird Circle Hobbs, New Mexico. 88240	U.S. Army Research Laboratory Technology Transfer Office RDRL-DPP/T. Mulkern Bldg 321 RM 110 APG MD 21005-5425
Web Site	http://nhfoundation.net/wp/	Main: www.arl.army.mil Technology Transfer: http://www.arl.army.mil/www/default.cf m?page=521

JOINT WORK STATEMENT

between

U.S. ARMY RESEARCH LABORATORY

and

NEW MEXICO JUNIOR COLLEGE RESEARCH FOUNDATION

doing business as

NEW HORIZONS FOUNDATION

ARL JWS# (15-58-01)

Entitled

Exploration of ARL "Vorticity Muffler" for Oil & Gas Industry Applications

	NEW HORIZONS FOUNDATION	U.S. ARMY RESEARCH LABORATORY	
ACRONYM	COLLABORATOR	ARL	
Technical	Dale Gannaway	Michael V. Scanlon	
POC	Office 575-492-4712	US Army Research Laboratory	
w/phone #	Cell 512-788-3650	(RDRL-SES-P)	
	dgannaway@nmjc.edu	Phone: 301-394-3081	
		michael.v.scanlon2.civ@mail.mil	
	Tim Wittig, alternate		
	202-841-0655		
	wittigsall@aol.com		
Legal POC	K. Lance Anderson	Alan Kalb	
w/ phone#	Office: 512.320.7200 7226	ARL Legal Counsel	
	Cell: 512.497.4007	301-394-1769	
	andersonl@gtlaw.com	alan.i.kalb.civ@mail.mil	
Administrative	Dale Gannaway	Thomas Mulkern	
POC	Office 575-492-4712	Technology Transfer Office	
W/ phone#	Cell 512-788-3650	410-278-0889	
	dgannaway@nmjc.edu	thomas.j.mulkern.civ@mail.mil	
Signatory	Dale Gannaway	Dr. Thomas P. Russell	
	Executive Director	Director	
	dgannaway@nmjc.edu	U.S. Army Research Laboratory	
Mailing	New Maying Lunion College	II.C. A may Dagagnah I ahanatam	
Mailing Address	New Mexico Junior College 1 Thunderbird Circle	U.S. Army Research Laboratory	
Address		Technology Transfer Office RDRL-DPP/T. Mulkern	
	Hobbs, New Mexico. 88240		
	http://nhfoundation.net/wp/	Bldg 321 RM 110	
		APG, MD 21005-5425	

TABLE OF CONTENTS

PARAGRAPH		PAGE No.
PREAMBLE		
ARTICLE I -	GENERAL	
ARTICLE II -	SPECIFIC DEFINITIONS	
ARTICLE III -	SUMMARY OF EFFORT	
ARTICLE IV -	ESTIMATE OF RESOURCES	
ARTICLE V -	COOPERATIVE RESEARCH	,.,.,,
ARTICLE VI -	DURATION OF AGREEMENT	
ARTICLE VII -	TERMINATION	
ARTICLE VIII -	SPECIFIC NEGOTIATED TERMS	
ARTICLE IX -	ACCEPTANCE	
APPENDIX A -	POINTS OF CONTACT	
APPENDIX B -	FOREIGN NATIONALS	10
APPENDIX C -	CONTROLLED MATERIAL	1
APPENDIX D - B	ACKGROUND INTELLECTUAL PROPERTY	12

JOINT WORK STATEMENT

PREAMBLE

The purpose of this Joint Work Statement (JWS) is to establish the specific Research & Development (R&D) efforts in conjunction with Cooperative Research and Development Agreement (CRADA) (15-58) between the U.S. Army Research Laboratory (hereinafter referred to as "ARL") and New Horizons Foundation (hereinafter referred to as "COLLABORATOR"). Whereas the COLLABORATOR and ARL have agreed to mutually engage in a CRADA, both Parties do now therefore agree to the following specifications which shall govern the conduct as set forth in this JOINT WORK STATEMENT (hereinafter referred to as "JWS"):

Article I - General

1.1 Under Cooperative Research and Development Agreement (CRADA 15-58), ARL and the COLLABORATOR agree to abide by the CRADA and the technical details within this Joint Work Statement as follows

Article II - Specific Definitions

2.1 Term: Definitions:

N/A

Article III - Summary of Effort

3.1 Title:

Exploration of ARL "Vorticity Muffler" for Oil & Gas Industry Applications

3.2 Research Problem:

Improved sound suppression is critical to Army generators, APUs, large construction machinery, as well as other diverse DoD equipment. Currently, standard engine and machinery mufflers use a low-tech approach of successive omnidirectional expansions and contractions with flow path confusion to reduce acoustic pressure and disrupt engine pulsations for noise abatement. This provides reasonable attenuation and may allow manufacturers of large equipment to sometimes meet minimal OSHA noise regulations, but they often fall short in achieving the desired levels of noise/sound suppression. This is especially true for oil & gas mining operations that very often fail to meet OSHA standards; especially drilling and servicing operations that occur near residential or other populated areas.

3.3 Research Plan:

Under this CRADA, ARL will work with New Horizons Foundation "NHF" (COLLABORATOR), a technology intermediary based in the energy-focused Permian Basin region of New Mexico. ARL and COLLABORATOR will work to develop a potentially revolutionary vorticity muffler (based on existing ARL "vorticity muffler" technology) that applies dynamic fluid flow interactions to create vorticity and vortex-diode properties to separate and contain high-pressure exhaust gasses, increase the effective length of flow paths through contained circulatory vortex motion, and use momentum barriers to contain and average flow perturbations and noise. The ability to significantly reduce machinery/large equipment noise, without reducing performance, can not only have a huge impact on military and civilian noise

mitigation, but also potentially improve/increase operational run times in the important, domestic oil & gas mining industry.

3.4 Approach:

The CRADA will be mutually beneficial in that: a) COLLABORATOR offers readily available access to very large capacity, noisy engines that are representative of Army heavy equipment and generators, b) COLLABORATOR has the means to manufacture various designs provided by ARL, c) COLLABORATOR test sites offer wide open areas without interfering noise sources and d) COLLABORATOR has skilled mechanics/operators who can safely install and test devices under demanding conditions and evaluate any effects on performance. ARL contribution includes: a) ARL developed novel "vorticity muffler" technology that can be adapted for use under this CRADA, b) ARL expertise in design, modeling and simulations that will allow for iterative improvements throughout the course of the CRADA and c) ARL expertise in acoustic measurements and signal processing related to noise and detection.

3.5 Support In Kind:

COLLABORATOR will:

- 1. Have primary fabrication responsibility for all prototypes and some of the related components developed under the CRADA.
- 2. Supervise and fund a metal fabrication facility to produce the mutually agreed upon iterations of the ARL-designed test mufflers and fixtures.
- 3. Assist in the understanding of the ranges of various flow, pressure & piston-rates over typical loading and operating conditions.
- 4. Provide OEM muffler dimensions, locations of input/output ports, and mounting configurations.
- 5. Contribute to the development of a test plan to comparatively test engine performance of OEM & ARL-designed mufflers using Partner facilities and test equipment.
- 6. Provide ARL with onsite access, during programmed visits, to the large engines and equipment that are the subject of investigation; primarily "pulling" engines and related equipment.
- 7. During ARL measurements, operate the test engines and equipment operating under load and develop a repeatable means to vary load on test engines or pulling units (i.e., pulling rods or sleeves, or lifting a heavy object).
- 8. Provide at least one test site that offers wide open areas, without interfering noise sources and reflections, for sound directivity and level measurements under demanding conditions.
- 9. Provide operators, mechanics, and safety personnel to enable the installation and testing of multiple variants of mufflers on the test systems.
- 10. Provide expert advice and observations regarding any effects mufflers may have on system performance, including any available quantifiable metrics regarding back-pressure, change in MPG, HP, temperature, and torque for each muffler tested under similar conditions.

- 11. Conduct extended duration and qualitative evaluation of final muffler design to assess long-term performance & robustness of manufacturing methods.
- 12. Provide logistical/planning support to facilitate programmed ARL visits; including assistance in the coordination of travel, accommodations and transportation to and from test sites, meeting sites and airport.

ARL will:

- Have primary design responsibility for all prototypes and related components developed under the CRADA.
- 2. Create SolidWorks mechanical designs of primary and alternate muffler prototypes and related components.
- 3. With regards to related components, have manufactured at ARL a limited number (up to 3 iterations) of research-grade components, fixtures & sensor couplers.
- 4. Investigate, through computational fluid dynamic (CFD) modeling and simulation (M&S), the relationship between geometry of diodes, vorticity, chamber dimensions, and complex flow.
- 5. Conduct CFD modeling & simulation at ARL-VTD in MD.
- 6. Use acoustic, heat, flow and pressure data from the operation of large engines under load to improve and validate existing designs through M&S.
- 7. Provide Partner's designated representative with technical assistance to facilitate the fabrication of the prototypes.
- 8. Conduct acoustic measurements of various sound suppression devices at partner site, and on partner equipment, during programmed visits using instrumentation grade microphones, data acquisition and sound level meters.
- 9. Recommend and help develop a plan for the capture of additional data/measurement metrics; such as, photo and/or video documentation, and other truth data sensors (i.e., pressure, flow, temperature, RPM, etc.).
- 10. Provide Partner acoustic data and signatures as measured.
- 11. Evaluate effectiveness of acoustic attenuation, broadband spectral response, and BA metrics using both measured data and CFD M&S results.
- 12. Perform iterative design innovations based on prior test results, and provide new design(s) to Partner for them to build next test device.
- 13. Travel to Partner test facility to conduct and participate in testing and evaluations; not to exceed 4 total trips per year; up to 8 total trips during CRADA. Each visit will consist of approximately 3-days onsite and will be schedule to occur approximately once per quarter.

ARL and COLLABORATOR will do jointly:

- 1. Conduct data analysis and document findings in a report.
- 2. Participate in the evaluation of muffler effectiveness, to include providing written summaries, data, and graphical representations of performance for collaborative report generation.
- 3. Assist in generating an initial baseline data-set of OEM equipment that includes exhaust flow, pressure, temperature & piston-rate specifications of identified machinery/equipment being researched in order to help initiate ARL's CFD modeling.

Article IV - Estimate of Resources

4.1 Support In Kind:

COLLABORATOR Value of Effort:

- a. Personnel: Salary / Labor: \$215,000
- b. Facilities/testing, materials and manufacturing: \$32,000
- c. Travel/TDY: \$5,680
- d. Other: \$44,000

COLLABORATOR'S ESTIMATED YEARLY VALUE OF EFFORT: \$296,680

ARL Value of Effort:

- a. Personnel: Salary / Labor: \$170,000
- b. Materials & manufacturing: \$8,000
- c. Travel/TDY: \$12,000

ARL'S ESTIMATED YEARLY VALUE OF EFFORT: \$190,000

4.2 Payment: In circumstances where funding is due to ARL from the COLLABORATOR, a check or U.S. Postal Money Order, payable to the "Treasurer of the United States" with reference to this agreement and mailed to: "U.S. Army Research Laboratory, Technology Transfer Office, RDRL-DPP/Thomas Mulkern, Bldg 321 RM 110, APG MD 21005-5425"

Article V - Cooperative Research

- 5.1 Joint Work Statement (JWS): Cooperative research and development efforts under this JWS shall be performed in accordance with the over-arching CRADA and the terms and conditions set forth therein.
- 5.2 Points of Contact: The principal Points of Contact for ARL and COLLABORATOR are as set forth in the form attached hereto as Appendix A.
- 5.3 Foreign Nationals: The COLLABORATOR shall identify all Foreign Nationals that will be working on or exposed to efforts of this JWS in the form attached hereto as Appendix B.
- 5.4 Controlled Material: ARL shall identify all preexisting material and any materials developed during the execution of this JWS that are defined as "controlled" which would require special requirements in the form attached hereto as Appendix C.
- 5.5 Background Intellectual Property: Both Parties shall disclose all relevant background intellectual property in the form attached hereto as Appendix E.

Article VI - Duration of Agreement

- 6.1 Duration: The parties mutually recognize that the JWS cannot be rigidly defined in advance and that projected milestones are subject to adjustment. In no case will this JWS extend beyond the termination of the over-arching CRADA.
- 6.2 Effective Date: The effective date of this JWS shall be the date of the last signature.

Article VII - Termination

- 7.1 Mutual Consent: COLLABORATOR and ARL may terminate this JWS at any time by mutual consent.
- 7.2 Unilateral Action: Either Party may unilaterally terminate this JWS by giving the other Party written notice, not less than thirty (30) days prior to the desired termination date. Pending termination pursuant to this Article, the Parties agree that performance of work under this Agreement shall continue diligently in accordance with this JWS.

Article VIII - Specific Negotiated Terms

8.1 Fundamental Research Limitation: The research developed and delivered by the COLLABORATOR under this agreement, including all data, inventions, discoveries, IS NOT limited to fundamental research, therefore paragraph 13.1 under ARTICLE XIII does not apply to this JWS.

Article IX - Acceptance

IN WITNESS THEREOF, the parties hereto have caused this **JOINT WORK STATEMENT** to be executed by their duly authorized representatives.

NEW HORIZONS FOUNDATION	U.S. ARMY RESEARCH LABORATORY
BY: Law January	BY:
Dale Gannaway Executive Director New Horizons Foundation	Dr. Thomas P. Russell Director U.S. Army Research Laboratory
Date: 1/.13.2015	Date:

APPENDIX A - Points of Contact

	NEW HORIZONS FOUNDATION	U.S. ARMY RESEARCH LABORATORY
ACRONYM	COLLABORATOR	ARL
Technical POC w/phone # (if applicable)	Dale Gannaway Office: 575-492-4712 Cell: 512-788-3650 dgannaway@nmjc.edu Tim Wittig, Alternate 202- 841-0655 wittigsall@aol.com	Michael V. Scanlon US Army Research Laboratory (RDRL-SES-P) Phone: 301-394-3081 michael.v.scanlon2.civ@mail.mil
Legal POC w/ phone#	K. Lance Anderson Office: 512.320.7200 7226 Cell: 512.497.4007 andersonl@gtlaw.com	Alan Kalb ARL Legal Counsel 301-394-1769 alan.i.kalb.civ@mail.mil
Administrative POC W/ phone#	Dale Gannaway Office: 575-492-4712 Cell: 512-788-3650 dgannaway@nmjc.edu	Thomas Mulkern Technology Transfer Office 410-278-0889 thomas.j.mulkern.civ@mail.mil
Signatory	Dale Gannaway Executive Director Office 575-492-4712 Cell 512-788-3650 dgannaway@nmjc.edu	Dr. Thomas P. Russell Director U.S. Army Research Laboratory
Mailing Address	New Horizons Foundation 1 Thunderbird Circle Hobbs, New Mexico 88240	U.S. Army Research Laboratory Technology Transfer Office RDRL-DPP/T. Mulkern Bldg 321 RM 110 APG MD 21005-5425
Web Site	http://nhfoundation.net/wp/	Main: www.arl.army.mil Technology Transfer: http://www.arl.army.mil/www/default.cf m?page=521

APPENDIX B - Foreign Nationals

(COLLABORATOR)
Foreign Nationals Working Under this JWS

Name	Home Address	Nationality	Permanent Resident Card (Green Card)#	Visa Type (if applicable)

APPENDIX C - Controlled Material

ARL Controlled Material

Title of Material	General Description of Material	Applicable Regulation	Required Controls
None			
•			

APPENDIX D - Background Intellectual Property

JWS RELEVANT INTELLECTUAL PROPERTY (PATENTS) OR PROPRIETARY INFORMATION

ARL Background Intellectual Property *that has NOT been reduced to practice*: NONE

ARL Background Intellectual Property *that has actually been reduced to practice*: US Patent # 7,854,297, Dec. 21, 2010, Michael V. Scanlon, Muffler and Related Systems.

COLLABORATOR Background Intellectual Property *that has actually been reduced to practice*: NONE

COLLABORATOR Background Intellectual Property that the US Government has an interest in: NONE

PARTNERSHIP INTERMEDIARY AGREEMENT (PIA)

BETWEEN

U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER

AND

NEW HORIZONS FOUNDATION, LLC

PREAMBLE

Under authority of the U.S. Federal Technology Transfer Act of 1986 (Public Law 99-502, October 20, 1986, as amended), (hereinafter referred to as 15 USC, Section 3715) the U.S. Army Armament, Research Development and Engineering Center (ARDEC), located at Picatinny Arsenal, N.J. 07806-5000, and the New Mexico Junior College Research Foundation, LLC, dba The NEW HORIZONS FOUNDATION (NEW HORIZONS FOUNDATION), a New Mexico not for profit corporation (controlled by the New Mexico Junior College, a state charted institute of higher education) whose headquarters are located at 1 Thunderbird Circle, Hobbs, New Mexico, 88240, enter into this Partnership Intermediary Agreement (PIA), which shall be binding upon the Parties according to the clauses and conditions hereof and for the term and duration set forth.

The Parties agree as follows:

Article 1. DEFINITIONS

- 1.1 The term "Agreement" as used herein shall mean a PIA as authorized by Title 15 USC Section 3715 for performance of partnership intermediary services. This Agreement is neither a procurement of procurement contract subject to the Federal Acquisition Regulation, nor a support agreement subject to the Department of Defense (DoD) Grant and Agreement Regulations.
- 1.2 The term "Data" means recorded information of any kind regardless of the form or method of recording.
- 1.3 The term "Federal Laboratory" means any organization defined in Title 15 USC Section 3703(6), as amended.
- 1.4 The term "Government" refers to the United States Government.
- 1.5 The term "Invention" means any discovery or invention that is or may be patentable or otherwise protected under Title 35, U.C, or any novel variety of plant that is or may be patentable under the Plant Variety Act (Title 15 USC 3703(9)).
- 1.6 The term "License Agreement" shall mean an agreement to license a federally-owned invention under Title 35 USC, Section 207-11 and 37 CFR Part 404.

- 1.7 The term "Proprietary Information" shall mean any and all information that embodies trade secrets developed at private expense or business, commercial, or financial information that is privileged and confidential provided that such information: is not known or available from other sources without obligations concerning its confidentiality; has not been made available by the owners to others without obligation concerning its confidentiality; or has not been developed independently by persons who have had no access to the information.
- 1.8 The term "Nonreleasable ARDEC information" shall mean any information marked by ARDEC as "Nonreleasable ARDEC information." "Nonreleasable ARDEC information " may include, but is not limited to: any operational security information (OPSEC), limited distribution information, financial data, advanced procurement information (e.g., future requirements, statements of work, and acquisition strategies), source selection information (e.g., bids before made public, source selection plans, and rankings of proposals), trade secrets and other confidential business information (e.g., confidential business information submitted by a contractor), attorney work product, information protected by the Privacy Act (e.g., social security numbers, home addresses and telephone numbers), and other sensitive information (e.g., program, planning and budgeting system information).

Article 2. PARTIES

- 2.1 The U.S. Army Armament Research, Development and Engineering Center, Picatinny Arsenal, NJ 07806-5000, is the U.S. Army provider of research, product development and full life cycle engineering for ammunition, weapons, fire control systems, explosives, propellants, rapid prototyping, additive manufacturing, environmental research, advanced materials, and related technologies.
- 2.2 The NEW HORIZONS FOUNDATION is a New Mexico based nonprofit corporation partially funded by the government of Lea County New Mexico, and is the Partnership Intermediary cited herein in accordance with Title 15 USC Section 3715. The NEW HORIZONS FOUNDATION's primary mission is to coordinate the interests of state and local economic development authorities, local municipalities, small businesses, institutions of higher education, and private sector organizations that need or can: make economically effective use of specific technologies development at ARDEC or other Federal Laboratories, that can be efficiently commercialized as a means to enhance the United States economy; advance the position of the United States in international trade; and expand opportunities for United States energy independence. Such efforts will assist in developing and maturing ARDEC technology, maintaining and advancing critical skills, and enhancing the mission of ARDEC, which includes transferring the results of Federal R&D investment to strengthen the United States industrial base and economic security.

Article 3. BACKGROUND AND PURPOSE

3.1 Title 15 USC, Section 3715 (Use of Partnership Intermediaries) authorizes the Director of a Federal Laboratory to enter into memoranda of understanding and contracts with State and local governmental agencies and nonprofit entities owned, chartered, funded, or operated by or on behalf of a State or local government to perform partnership intermediary services for a federal laboratory that increase the likelihood of success in the conduct of cooperative or joint activities with small business firms and educational institutions.

3.2 The purpose of this agreement is to promote cooperative activities between ARDEC and small business firms and educational institutions supported by the NEW HORIZONS FOUNDATION. The support to be provided by THE NEW HORIZONS FOUNDATION as hereinafter described is intended to assist, advise, evaluate, or otherwise cooperate with small business firms, institutions of higher education or educational institutions that need or can make demonstrably productive use of technology-related assistance available at various ARDEC locations or in collaboration with other Federal laboratories.

Article 4. DESIGNATED REPRESENTATIVES

4.1 ARDEC's designated representative responsible for coordination of activities under this Agreement is Timothy Ryan, (973)724-7953, timothy.s.ryan.civ@mail.mil. This representative will coordinate directly with the designated NEW HORIZONS FOUNDATION representative. The NEW HORIZIONS FOUNDATION's designated representative responsible for coordination of activities under this Agreement is Dale Gannaway, Executive Director, 575-492-4712, dgannawy@nmjc.edu. The NEW HORIZONS FOUNDATION representative will coordinate directly with the designated ARDEC representative.

Article 5. AGREEMENT ACTIVITIES

- 5.1 To accomplish the purpose of this Agreement, the Parties' representatives will engage in discussions and use their best efforts to identify, from within ARDEC and other Federal organizations, technologies, facilities, know-how, expertise, inventions, software, and the like that may meet technology needs of small business firms and educational institutions, among others, that need or can make demonstrably productive use of such technology. The Parties will use their best efforts to accomplish the purpose of this Agreement.
- 5.2 Licensing Inventions. Based upon NEW HORIZONS FOUNDATION identification of technology needs, ARDEC will identify to the NEW HORIZONS FOUNDATION such of its inventions, capabilities, technologies, know-how, expertise, software, materials and the like that are available for licensing, CRADAs or other appropriate agreements. The NEW HORIZONS FOUNDATION will work with ARDEC to locate and identify small businesses, educational institutions, and partnership containing the same that have an interest in utilizing, through licensing or other agreements, ARDEC technologies. The NEW HORIZONS FOUNDATION will engage interested businesses, educational institutions, governmental units, and economic development entities with the intent of technology commercialization or utilization and new and/or existing business expansions based on ARDEC or other Federal technologies and facilities.
- 5.3 ARDEC support for Non-Government Activities. ARDEC will identify to the New HORIZONS FOUNDATION design, fabrication, testing and characterization capabilities that may be made available to small business, educational institutions, and any other interested entities that need or can make use of technology-related assistance from ARDEC. The NEW HORIZIONS FOUNDATION will advise such small businesses, educational institutions, and other interested entities of the availability of such capabilities and the related procedures and conditions required for use of such capabilities. The NEW HORIZONS FOUNDATION may propose establishing CRADAs, testing or service agreements, or other appropriate instruments with ARDEC to promote small business, educational institutions, and other interested entities' appropriate use and/or support of ARDEC capabilities and facilities.

- 5.6 Technology Marketing Programs and Showcases. ARDEC and the NEW HORIZONS FOUNDATION will cooperate to showcase the capabilities of ARDEC to small businesses, educational institutions, state and local governments, economic development entities and the like, particularly in the energy sector, to further the purposes of this Agreement and highlight, as appropriate, the results of this effort, examples including visits, tours, and preparation of marketing and educational materials.
- 5.7 Businesses, Educational Institutions and Local/State Communities. The NEW HORIZONS FOUNDATION intends to identify and sponsor activities and programs that showcase the capabilities of small businesses and educational institutions that may be of interest to ARDEC in connection with its research and development mission. The NEW HORIZONS FOUNDATION plans to interface with small business, educational institutions, local and state government, economic development institutions and communities to work with ARDEC in training and other collaborative initiatives that are mutually beneficial to some or all of these entities.

Article 6. FUNDING

- 6.1 No funds of either Party are in any way committed or obligated for any purpose whatsoever by virtue of entering into this Agreement. This Agreement does not identify or require the transfer of funds between the Parties. This Agreement shall neither be construed to authorize or guarantee funding for any proposals submitted in response to any solicitation, nor shall it be construed as a guarantee of future funding, nor shall this Agreement be construed as an endorsement of any proposal submitted by any Party or non-Party.
- 6.2 Each Party shall be responsible for funding its own activities under this Agreement. Each Party is individually responsible for assuring that its funding commitments are fully restrictions applicable to it by law and regulation.

Article 7. INTELLECTUAL PROPERTY

- 7.1 In the event that employees of the Parties make an Invention or produce Technical Data while performing the Agreement activities, each party shall have title to the Data or Invention made or produced by its employees. Inventions made and Data produced jointly shall be jointly owned by the Parties in the form of an equal and undivided interest in the title. When pooling the rights to inventions made and Data produced by the Parties or otherwise, the parties may jointly choose to negotiate separate agreement(s) to facilitate such opportunities that may serve to accelerate the development and military/civilian use.
- 7.2 Rights in intellectual property created under a separate agreement resulting from this Agreement shall be determined in accordance with the terms of the separate agreement.
- 7.3 No rights in any intellectual property previously made or developed by either party is conveyed or granted by or under this Agreement..

Article 8. PROPRIETARY OR NON-RELEASABLE ARDEC INFORMATION

8.1 During performance of activities under this Agreement, the Parties may require access to Proprietary Information of each other and non-Party small businesses, educational institutions, and other interested entities. Likewise, such non-Party small businesses, educational institutions, and other interested entities

may require access to information about patentable Inventions that are exempted from disclosure under Title 35 USC, Section 205 (Confidentiality). The Parties agree to use their best efforts to enter into agreements with each other and any non-Party entities as may be necessary to protect such information from unauthorized use or disclosure and to refrain from using such information for any purpose other than that for which it was furnished.

8.2 No exchange of information under this Agreement is intended to convey to the receiving Party any license or other rights in such information unless otherwise expressly provided in writing by the disclosing Party.

Article 9. GENERAL PROVISIONS

- 9.1 Relationship of the Parties. The relationship of the Parties is that of independent parties and not as agents of each other, partners, or participants in a joint venture.
- 9.2 No classified information shall be exchanged under this Agreement.
- 9.3 Export Control. Work under this agreement may involve militarily critical technology, or technical data, defense services, and/or defense articles, (hereafter collectively referred to as "information"), the export of which is restricted by statute, executive order, or regulation (including, but not limited to, the Arms Export Control Act, the International Traffic in Arms Regulation, the Export Administration Act). The Party desiring to export shall ensure full compliance with all applicable requirements and restrictions before it makes any disclosure that may be deemed an export of such information. Nothing in this article is intended to waive any requirements imposed by any other U.S. Government agency with respect to disclosure of export controlled information or militarily critical technology to foreign nationals.

9.4 Liability

- 9.4.1 Government Liability. ARDEC is an activity of the U.S. Government. As such, the sovereign immunity of the United States applies to the activities of ARDEC. The Government shall only be liable for the acts of its officers and employees to the extent provided for in the Federal Tort Claims Act (Title 28 USC Section 2671 et seq.) and other applicable laws and regulations of the United States that specifically waive sovereign immunity. Nothing in this Agreement shall be construed as a waiver of the sovereign immunity of the United States.
- 9.4.2 NEW HORIZONS FOUNDATION Liability. The NEW HORIZONS FOUNDATION shall be solely responsible for the actions of employees and the actions of those acting on its behalf in performance of this Agreement. Further, NEW HORIZONS FOUNDATION agrees to indemnify and hold harmless the U.S. Government for any loss, claim, damage, or liability of any kind due to an employee of NEW HORIZONS FOUNDATION arising in connection with this Agreement, except to the extent that such loss, claim, damage or liability arises from the negligence of ARDEC or its employees, as specified in the provisions of the Federal Tort Claims Act.
- 9.4.3 Force Majeure. Neither Party shall be liable for the consequences of a force majeure that (1) is beyond its 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 Agreement; and, (4) cannot be overcome by the exercise of due diligence. In the event of the occurrence of a force majeure, the Party unable to perform

shall notify the other Party. The Parties shall suspend performance only for such period of time as is necessary to overcome the result(s) of the force majeure event and shall use its best efforts to resume performance as quickly as possible.

- 9.5 Savings Provision. The illegality or invalidity of any provisions of this Agreement shall not impair, affect, or invalidate the other provisions of this Agreement.
- 9.6 Applicable Law. The Parties agree that the laws of the United States of America shall govern this Agreement for all purposes.
- 9.7 Termination of the Agreement.
- 9.7.1 Termination by Mutual Consent. The Parties jointly may elect to terminate this Agreement at any time by mutual written consent.
- 9.7.2 Unilateral Termination. Either Party may elect to terminate this Agreement for cause at any time by giving to the other Party not less than thirty (30) days advance written notice of the intent to terminate, the reason of cause and the effective date of termination.
- 9.7.3 Survivability. Article 1. DEFINITIONS. Article 6. FUNDING, Article 7. INTELLECTUAL PROPERTY, Article 8. PROPRIETARY OR PROTECTABLE INFORMATION, Article 9. GENERAL PROVISIONS, and Article 10. PUBLICATIONS, shall survive the completion, termination or expiration of this Agreement.
- 9.8 Duration of the Agreement. This Agreement shall remain in effect for 5 YEARS from its effective date unless previously terminated or extended as provided by this Agreement. The Parties may by mutual written agreement extend the term of the Agreement.
- 9.9 Property. Each Party shall retain title to all tangible property that it has acquired by purchase or gift and used in performance of tasks under this Agreement.
- 9.10 Titles and Headings. Titles and headings of the sections and subsections of this Agreement are for convenience of reference only and do not form a part of this Agreement and shall in no way affect the: interpretation thereof.
- 9.11 Agreement Not An Exclusive Agreement. The rights granted by ARDEC to the NEW HORIZONS FOUNDATION under this Agreement to perform the services of this Agreement are not exclusive. The Government may grant similar powers to other entities having the same or a similar purpose to perform the same or similar services as those discussed herein at any time.
- 9.12 Entire Agreement. This Agreement constitutes the entire agreement between the Parties concerning the subject matter hereof and supersedes any prior understanding or written or oral agreement relative to said matter.
- 9.13 Reports.
- 9.13.1 Annual Report. The NEW HORIZONS FOUNDATION shall submit to ARDEC an annual report summarizing its efforts in furtherance of this Agreement. The report should provide a concise and factual

discussion of the results of its efforts to include: a listing of small businesses. academic institutions, and other interested entities that it identified; significant accomplishments resulting from those agreements (publications, technological developments, inventions, patents, product development and sales, etc.); any measurable effect upon community business and employment; lessons learned and recommendations for improvement; and such other information deemed pertinent by the NEW HORIZONS FOUNDATION or ARDEC.

- 9.13.2 Final Report. The NEW HORIZONS FOUNDATION shall submit a final report summarizing the entire effort during the term of the Agreement' in the same topic areas required for the annual report described above.
- 9.14 Disputes. The Parties agree to use reasonable efforts to reach a fair settlement of any dispute. If such efforts are unsuccessful, remaining issues in dispute will be referred to the signatories or their successors for resolution.
- 9.15 Waivers. No provision of this Agreement shall be considered waived by any Party hereto unless such waiver is given in writing to the other Party. 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 right provided herein or by law, shall not be deemed a waiver of any right of any Party hereto.
- 9.16 Amendments. The Parties shall, upon reasonable notice of the proposed modification by the Party desiring the change, confer in good faith to determine the desirability of such modification. Such modification shall be effective upon the date of the last signature of the authorized representatives of each of the Parties.
- 9.17 Use of Name or Endorsements. Neither Party shall use the name of the other Party on any product or service that is directly or indirectly related to this Agreement without the prior approval of the other Party. By entering into this Agreement, neither Party directly or indirectly endorses any product or service provided, or to be provided, by the other Party, its successors, assignees, or licensees. Neither Party shall imply in any way that this Agreement is an endorsement by the other Party of any product service.
- 9.18 Notices. All notices are to be sent to the PIA representatives identified in Article 4.1.

Article 10. PUBLICATIONS

- 10.1 Publications of Results. The NEW HORIZONS FOUNDATION is encouraged to publish results of the Agreement. Each article planned for publication shall be submitted to the designated representative for review and approval prior to submission for publication, such approval not to be unreasonably withheld.
- 10.2. Governmental Use. Any publication based on or developed under this Agreement will reflect that the U.S. Government is licensed to reproduce and distribute the article for Governmental purposes notwithstanding any copyright or other restrictive legends, provided however, if any such publication contains Confidential and/or business proprietary information such Governmental purpose publication will be limited to "distribution B" and commercial use restricted, unless otherwise preapproved by the NEW HORIZONS FOUNDATION.

10.3 Disclaimer. Published articles shall contain the statement that "the views and conclusions contained herein are those of the authors and should not be interpreted as necessarily representing the policies or endorsements, either expressed or implied, of the Department of Defense of the United States Government".

Article 11 EFFECTIVE DATE

11.1 This Agreement shall become effective upon the date of the last signature of the authorized representatives of each of the Parties.

Article12. SIGNATURES

For the NEW HORIZONS FOUNDATION:

I, the undersigned, am duly authorized to bind the NEW HORIZONS FOUNDATION to this Agreement and do so by affixing my signature hereto.

Entered into this 10th day of 2015

Dale Gannaway

Executive Director

NEW HORIZONS FOUNDATION, LLC.

For ARDEC:

I, the undersigned, am duly authorized to bind ARDEC to this Agreement and do so by affixing my signature hereto.

Entered into this 26 day of Feb, 2015

John F. Hedderich III

Director

U.S. Army Armament Research, Development and Engineering Center

RDAR-D

Picatinny Arsenal, NJ 07806-5000



Driving Innovation throughout the Permian Basin.

Board of Directors

November 13, 2015

Cold Spray

No	Item	To Be Complete	Completed
1	Discuss project with Pemco	10/28	10/28
2	Obtain interest in moving forward from PEMCO	11/10	11/10
3	Sign Memo of Understanding (MOU) w/ PEMCO	11/20	
4	Market Survey, Define Business Model/Plan	11/20	
5	Equipment Vendor Survey	11/20	
6	Provide Equipment Recommendation and Plan to Steve M.	12/1	
7	Obtain Funding	12/17	
8	Order Equipment	12/18	
9	Define Training Plan	12/1	
10	Define Student Course Outline/Program (NMJC & PEMCO)		
11	Install Equipment		
12	Training		
13	Begin Offering Services at PEMCO		
14			

Cold Spray Business Model

- No real Intellectual Property only Trade Secrets & Process
- Substantial up front cost by NHF
- NHF to receive 5% fee on PEMCO service revenue from process
- PEMCO to provide ancillary equipment required
- PEMCO will pay for training of their staff
- Require equipment access for student training & program
- Territory shall be Permian Basin

Silent Muffler

No	Item	To Be Complete	Completed
1	Sign Agreement with Army Research Lab (ARL)	11/13	
2	Define Project	11/30	
3	Market Analysis & Feasibility	12/15	
4	Define Market Target	1/15/16	
5	Identify Commercialization Partner(s)		
6	Collect Field Data for Design		
7	Initial Muffler Design		
8	Fabricate Prototype Muffler		
9	Test Prototype Muffler		
10	Modify Design		
11	Re-test Modified Design		
12	Finalize Design		
13	Go To Market		
14			

Shape Charge Fracking

No	Item	To Be Complete	Completed
1	Define Project #1 – Serpentine Field	11/15	
2	Create Engineering Services Agreement w/ Picatinny	12/1	
3	Market Analysis	12/15	
4	Project Feasibility	12/31	
5	Initial Design of Project #1		
6	Build Prototype(s) – Picatinny		
7	Identify Field Service Partner	12/15	
8	Field Test Prototype #1		
9	Modify Design		
10	Define Project #2 – Conventional Formations		
11			
12			
13			
14			

Produced Water Cleanup

No	Item	To Be Complete	Completed
1	Send 5 gal sample of produced water to Micronics		
2	Need water analysis of sample		
3	Define Project Data and Business Model		
4	Market Analysis		
5	Project Feasibility		
6	Define Project		
7	Identify Field Service Partner		
8	Sign Agreement		
9	Field Test		
10	Modify Design		
11			
12			
13			
14			

NEW MEXICO JUNIOR COLLEGE

Vice President for Finance

To: New Mexico Junior College Board Members

From: Dan Hardin

Date: November 11, 2015

RE: Expenditure and Revenue Reports for October

The October expense report represents month four or 33 percent of the 2015/2016 fiscal year. The expenditure report reflects expenditure totals that include funds expended and encumbered. The total year-to-date funds expended and/or encumbered through October 2015 is \$16,703,866.00.

Instruction and General had total expenditures of \$7,332,024.00 through October of 2015, which is 33% of budget. In the other unrestricted funds Internal Services is well above the budget, there will be credits posting each month and this should be within budget by the end of the fiscal year. Student Aid, Auxiliary Enterprises, and Athletics also are above the 33% completion for the year. All of these areas have expenses that are tied to the beginning of the semester. Total current unrestricted funds expended year-to-date is \$9,412,322.00, which is 36% of the budget for unrestricted funds.

Expenditures year-to-date for grants under the restricted funds is \$1,011,150.00, which is 49% of the budget for grants. Restricted student aid has expenditures of \$1,926,189.00 which is 39% of the budget for student aid. Financial Aid has leveled off from its downward trend and is more consistent with the previous year. In FY 13 and FY 14 there was a decrease in Student Aid which was matching the downward trend in Student Credit Hours.

Expenditures for plant funds include expenses for Institutional projects BR&R and ER&R. The several major projects that make up most of the expense for FY 16, Infrastructure, Technology Upgrades, Campus Security, and the Entertainment Technology remodel. There are also several other smaller projects that are ongoing and several projects not yet started. The expense report is indicating that BR&R (Building Renewal & Replacement) is over the budgeted amount. The true budget number is \$1,063,210.03. There was \$465,929.03 carried forward from FY 15 that has not been added to the \$597,281.00 budget number. When we do the budget in April, it is difficult to predict what will be the remaining fund balance at the end of the fiscal year. So, we only budget what will be transferred for BR&R from I&G which is the \$597,281.00. A budget adjustment will be submitted to the HED to increase the budget for BR&R to the

true budget number of \$1,063,210.03 for BR&R.

Total expenditures for the month of October 2015 was \$3,136,613.00, the year-to-date total of expended and/or encumbered funds is \$16,703,866.00.

The total current unrestricted revenue is higher than the revenue total at this time last year. This is misleading in that operating revenue is down and restricted and plant revenues are up. Tuition and Fee revenue is consistent with last year while Oil and Gas revenue is down from this time last year. Property tax revenue will be funded in December or January. The other revenue streams seem to be on track for the first four months of the fiscal year. Total year-to-date current unrestricted revenue is \$7,804,672.00 as compared to \$8,410,776.00 in FY 15.

In restricted funds revenue is up as comparable to last year with Grant fund revenue substantially higher than at this time last year. This is because of the activity in the TAACCCT (Trade Adjustment Assistance Community College and Career Training) Grant.

Plant fund revenue for the month is \$1,721.00 in interest revenue from the LGIP funds. The College did not receive any drawdowns from STB or GOB funds.

Total year-to-date revenue is \$11,130,156.00

The Oil and Gas report shows the first month of revenue for this fiscal year, which was \$720,659.00 for the month of July. The months of August thru October have the monthly accrual of \$465,000.00 each month. Total Oil and Gas revenue through October including three months of accrual is \$2,115,660.00.

In reviewing the investment report, the LGIP fund remains at \$10,539,127.00 for the end of October. Currently, there is \$14,585,701.43 in designated capital projects.

This is the Financial Report for October 2015.

NEW MEXICO JUNIOR COLLEGE Expenditure Report October 2015

33% of Year Completed

2014-15 2015-16

		2014-15			2013	10	
		Year-to-Date	Percentage		Current		Percentag
	Final	Expended or	of Budget		Expended or	Expended or	of Budge
Fund	Budget	Encumbered	Expended	Budget	Encumbered	Encumbered	Expende
CURRENT UNRESTRICTED FUND							
COMMENT COMMENTED FOR D	1						
Instruction and General:							
Instruction	11,018,956	2,836,558	26%	10,103,380	894,943	2,851,924	28%
Academic Support	2,424,460	815,195	34%	2,628,124	218,784	912,027	35%
Student Services	2,074,588	613,355	30%	1,988,062	165,025	644,613	32%
Institutional Support	4,746,075	1,468,896	31%	3,694,568	472,261	1,648,167	45%
Operation & Maintenance of Plant	3,808,548	1,352,432	36%	3,658,460	278,820	1,275,293	35%
Subtotal - Instruction & General	24,072,627	7,086,436	29%	22,072,594	2,029,833	7,332,024	33%
Student Activities	0		0%	0	0		0%
Research	0		0%	0	0		0%
Public Service	0		0%	0	0		0%
Internal Service Departments	150,266	192,021	128%	85,520	44,998	176,529	206%
Student Aid	868,551	421,373	49%	668,551	8,817	333,687	50%
Auxiliary Enterprises	1,884,288	715,901	38%	1,858,486	64,893	1,032,576	56%
Athletics	1,425,760	502,019	35%	1,157,636	72,797	537,506	46%
Total Current Unrestricted Fund	28,401,492	8,917,750	31%	25,842,787	2,221,338	9,412,322	36%
CURRENT RESTRICTED FUND	}						
Grants	2,496,540	419,564	17%	2,055,881	102,999	1,011,150	49%
Student Aid	5,033,468	1,918,980	38%	4,989,673	122,359	1,926,189	39%
		,,-		,,-	,	, , ,	
Total Current Restricted Fund	7,530,008	2,338,544	31%	7,045,554	225,358	2,937,339	42%
PLANT FUNDS							
Capital Outlay / Bldg. Renewal & Repl.							
Projects from Institutional Funds	8,757,760	2,135,998	24%	8,587,117	233,798	2,649,500	31%
Projects from State GOB Funds	3,050,000	2,685,715	88%	5,000,000	,	317,875	6%
Projects from State STB Funds	0	0	0%			553,777	0%
Projects from General Fund	0	6,791	0%	О		,	0%
Projects from Private Funds	Ö	0	0%	o			0%
Projects from State ER&R	332,720	209,695	63%	332,720	8,472	79,127	24%
Projects from State BR&R	597,281	257,619	43%	597,281	447,647	753,926	126%
Subtotal - Capital and BR&R	12,737,761	5,295,818	42%	14,517,118	689,917	4,354,205	30%
Debt Service							
Revenue Bonds	0	0	0%	0	0	0	0%
Total Plant Funds	12,737,761	5,295,818	42%	14,517,118	689,917	4,354,205	30%
GRAND TOTAL EXPENDITURES	48,669,261	16,552,112	34%	47,405,459	3,136,613	16,703,866	35%

NEW MEXICO JUNIOR COLLEGE Revenue Report October 2015

33% of Year Completed

2014-15 2015-16

		2014-13			201	.J-10		
Fund	Final Budget	Year-to-date Revenue	Percentage of Budget Received	Budget	Current Revenue	Year-to-date Revenue	Percentage of Budget Received	
CURRENT UNRESTRICTED FUND								
Instruction and General:								
Tuition and Fees	3,684,200	2,020,414	55%	3,692,200	75,375	2,086,654	57%	
State Appropriations	6,047,200	2,056,554	34%	6,129,500	553,529	2,043,331	33%	
Advalorem Taxes - Oil and Gas Advalorem Taxes - Property	7,235,000 6,003,500	2,627,505 0	36% 0%	7,235,000 6,853,725	720,660	2,115,660 0	29% 0%	
Interest Income	5,000	675	14%	4,000	32	118	3%	
Other Revenues	367,161	201,683	55%	330,105	10,431	104,958	32%	
	-	-		-	-	-		
Subtotal - Instruction & General	23,342,061	6,906,831	30%	24,244,530	1,360,027	6,350,721	26%	
Student Activities	0	0	0%	0	0	0	0%	
Public Service	0	0	0%	0	0	0	0%	
Internal Service Departments	27,000	2,474	9%	27,000		4,379	16%	
Auxiliary Enterprises	2,251,000	1,337,538	59%	2,288,000	54,395	1,288,113	56%	
Athletics	483,400	163,933	34%	487,200	40,283	161,459	33%	
Total Current Unrestricted	26,103,461	8,410,776	32%	27,046,730	1,454,705	7,804,672	29%	
CURRENT RESTRICTED FUND								
Grants	1,157,859	433,351	37%	2,055,881	2,114	915,637	45%	
Student Aid	5,033,468	1,698,352	34%	4,989,673	76,449	1,739,747	35%	
Total Current Restricted	6,191,327	2,131,703	34%	7,045,554	78,563	2,655,384	38%	
PLANT FUNDS								
Capital Outlay / Bldg. Renewal & Rep		200 000	201			445.055	•••	
Projects from State GOB Funds	3,300,000	308,002	0% 0%	5,000,000		665,322	0% 0%	
Projects from State STB Funds Projects from General Fund	0	0	0% 0%	0			0% 0%	
Projects from General Fund Projects from Private Funds	0	0	0% 0%	0			0% 0%	
Interest Income (LGIP)	10,000	4,145	41%	10,000	1,721	4,778	48%	
Total Plant Funds	3,310,000	312,147	9%	5,010,000	1,721	670,100	13%	
GRAND TOTAL REVENUES	35,604,788	10,854,626	30%	39,102,284	1,534,989	11,130,156	28%	

NEW MEXICO JUNIOR COLLEGE Oil and Gas Revenue Report October 2015

33% of Year Completed

			OIL		GAS		COMBINED)
Month of Sales Distribution		Price per BBL	Lea County BBLs sold	Price per MCF	Lea County MCF sold	Monthly Revenue	2015-16 Original Budget	Variance Over (Under) Budget
Actual Accrual	July August September October November December January February March April May June	\$45.16	5,898,788	\$2.85	17,668,988	720,659 465,000 465,000 465,000	465,000 465,000 465,000 465,000 465,000 465,000 465,000 465,000 465,000 465,000	255,659 0 0 (465,000) (465,000) (465,000) (465,000) (465,000) (465,000) (465,000)
		/ear-to-Dat	Y.T.D.	. Equipment	n Tax Revenue : Tax Revenue t Tax Revenue		5,580,000 1,655,000 7,235,000	(3,464,341) (1,654,999) (5,119,340)

Source: New Mexico Taxation and Revenue Department

NEW MEXICO JUNIOR COLLEGE Schedule of Investments October 2015

33% of Year Completed

Financial Institution	Amount Invested	Account Number	Interest Rate	Interest Earned
State of New Mexico Local Government Investment Pool	10,593,127	7102-1348	0.104%	1,416
Plus deposits	0			
Less withdrawals	0			
Total LGIP investments	10,593,127			1,416

<u> </u>	
Capital Projects	10/31/2015
Vehicles	2,812.94
Technology Upgrade	369,305.68
JASI	22,793.44
WHM South Gallery	266,594.43
Baseball Field	23,181.45
Luminis Software	2,993.00
Landscaping	336,717.12
Campus Signage	2,801.67
Roof Replacement	27,382.26
Dorm/Apartment Refurbish	48,044.40
Campus Construction	337,170.54
Oil & Gas Training	161,766.39
Public Sector	19,227.00
Campus Security	77,146.48
Lumens Software-Distance Learng	5,000.00
Copier Replacement	274.00
Non-Recurring Compensation	152,169.10
Athletics	142,991.36
Student Life Programming	20,432.28
Warehouse/Cont Ed Remodel	1,464.99
Succession Plan	87,441.59
Energy Technology Equipment	300,000.00
WHM Exhibits	110,798.78
Mansur Hall Upgrades	51,043.75
Senior Warm Water Wellness Ctr	3,500,000.00
Driving Range Upgrades	200,000.00
Cosmetology Remodel	700,000.00
Entertainment Technology	2,500,215.30
Cafeteria Upgrade	217,303.00
Channel 19 Upgrade	32,719.62
FERPA & Title IX	688.50
Equestrian Center	3,000,000.00
Bob Moran Upgrades	88,589.78
Campus/Hospital Fencing	200,000.00
Turf Replacement	184,175.00
Watson Hall Theater	238,511.90
WHM Titanic Exhibit	18,500.00
Mary Hagelstein Upgrades	100,000.00
HVAC Software-Central Plant	200,000.00
Infrastructure Upgrade	827,760.04
Cadet Supplement	3,152.04
Workforce Training Contingency	4,533.60
TOTAL	14,585,701.43

NEW MEXICO JUNIOR COLLEGE

Athletic Director

5317 Lovington Highway Hobbs, NM 88240

Phone: (575)492-2741 Fax: (575)492-2756

To: New Mexico Junior College Board

From: Jeremy Capo

RE: Turf replacement NMJC Baseball Field

Date: November 11, 2015

Board members.

The New Mexico Junior College Baseball field is a show case for our region, but with any facility it must be updated and renewed. The infield portion of the Baseball field has a tremendous amount of use and wear, especially around the bases and home plate. The Athletic Department along with the Administration is requesting your approval to accept a quote from Field Turf in the amount of \$201,393.53 to replace the infield turf and install a tufted home plate area. Some of the less worn areas of the turf that will be taken up will be repurposed to cover the dugout floors and the worn turf on the practice mounds. Field Turf is the same vendor that installed the turf at the track. Field Turf is an approved vendor of AEPA (Association of Educational Purchasing Agencies), CES (Cooperative Education Services) is a member of AEPA. Procurement allows New Mexico Junior College using CES to take advantage of the AEPA procurement process to use Field Turf. Field Turf was selected because of the quality of the turf at the track and the recommendations from other Colleges that have the Field Turf product on their baseball fields.

Funding for this turf replacement project will come from the Turf Replacement fund 91589 4002 76091 911 in the amount of \$101,393.53 and from the Athletic fund 91562 4002 76091 911 for \$100,000.00.

Attached is the quote from Field Turf and the layout of the turf to be replaced.

Your consideration and approval is greatly appreciated.

Respectfully,

Jeremy Capo

Athletic Director



Date: November 12, 2015

To: New Mexico Junior College

Attn: Jeremy L. Cap

Phone: 575-492-2741

From: Jed Easterbrook – Regional Sales Manager

Phone: (303)775-6773

Email: Jed.Easterbrook@fieldturf.com

Subject: NM Junior College Baseball Infield - AEPA Turf Only Proposal

FieldTurf USA, Inc. is pleased to present the following proposal. Price estimates are based off of The Association of Educational Purchasing Agencies (AEPA) pricing. AEPA provides predetermined preferential pricing through approved vendors. Since the products have already been bid at the national level, individual schools do not have to duplicate the bidding process per AEPA IFB #012-C.

Synthetic Turf – Baseball Infield	L	.UMP SUM
FTHD-45 (1.75", 3 layer system) (Approx. 38,771 sqft)		173,375.46
The Lump Sum price includes: Inlaid baseball markings Tufted homeplate area		
Civil Scope:		25,755.35
 Removal & Disposal of existing synthetic turf at infield limits only (Approx. 38,771 sqft) 		
 Box drag existing aggregate base at limits of removed turf 		
Furnish and install (1) removable homeplate with ground anchor sleeve		
 Removal and replacement of the perimeter nailer board (approx. 745lf) – if existing nailer board can be re-used a credit of \$9.75/lf will be honored back to the Owner at the completion of the project. 		
Performance/Payment Bonds		2,262.72
Total	\$	201,393.53

EXCLUSIONS:

- a) The base upon which the FieldTurf field will be placed. FieldTurf shall not be responsible for the stability, the porosity, nor the approval of the base upon which the FieldTurf surface will be installed, the drainage system, nor any construction or modification of existing installations around the fields.
- a) The supply or installation of the concrete field edging.

- b) Import of additional fine aggregate if required for field leveling
- c) Laser grading of existing operating base
- d) Any costs associated with necessary charges relating to the delineation of the field.
- e) Unless otherwise specified, does not include any G-max testing.
- f) The supply of manholes or clean-outs or grates, or supply of the manhole covers.
- g) Any alteration or deviation from specifications involving extra costs, which alteration or deviation will be provided only upon executed change orders, and will become an extra charge over and above the offered price.
- h) Site security (I.E. Patrols)
- i) FieldTurf Maintenance Equipment

NOTES:

Notwithstanding any other document or agreement entered into by FieldTurf in connection with the supply and installation only of its product pursuant to the present bid proposal, the following shall apply:

- a) This bid proposal and its acceptance is subject to strikes, accidents, delays beyond our control and *force majeure*;
- b) Final payment shall be upon the substantial completion of FieldTurf's obligations;
- c) Accounts overdue beyond 30 days of invoice date will be charged at an interest rate of 1.5% per month (19.56% per annum);
- d) FieldTurf requires a minimum of 21 days after receiving final approvals on shop drawings to manufacture, coordinate delivery and schedule arrival of installation crew. Under typical field size and scenario, FieldTurf further requires 28 days to install the Product subject to weather and *force majeure*.
- e) FieldTurf requires a suitable staging area. Staging area must be square footage of field x 0.12, have a minimum access of 15 feet wide by 15 feet high, and, no more than 100ft from the site. A 25 foot wide by 25 foot long hard or paved clean surface area located within 50 feet of the playing surface shall be provided for purposes of proper mixing of infill material. Access to any field will include suitable bridging over curbs from the staging area to permit suitable access to the field by low clearance vehicles.
- f) This proposal is based on a single mobilization. If the site is not ready and additional mobilizations are necessary, additional charges will apply.
- g) FieldTurf shall be accountable for its negligence but shall not be bound by any penalty clauses.
- h) FieldTurf shall be entitled to recover all costs and expenses, including attorney fees, associated with collection procedures in the event that FieldTurf pursues collection of payment of any past due invoice.
- i) All colors are to be chosen from FieldTurf's standard colors.
- j) The infield will carry a 5 Year Third Party Insured warranty on the artificial turf with the exception of base paths, pitcher's mound and home plate, which shall carry a 2 year

AEPA Proposal Template Page 3 of 3

manufacturer's warranty.

The price is valid for a period of 90 days. The price is subject to increase if affected by an increase in raw materials, freight, or other manufacturing costs, a tax increase, new taxes, levies or any new legally binding imposition affecting the transaction.

Please contact Eric Fisher if you have any questions or require additional information regarding FieldTurf's SmartBuy Cooperative Purchasing Program. 888-209-0065, ext. 246 or via e-mail at eric.fisher@fieldturf.com. Be sure to visit our website at www.fieldturf.com.



CONCEPTUAL DRAWINGS ONLY: DRAWINGS ARE INTENDED ONLY TO BE A GRAPHIC RENDERING FOR PURPOSES OF PRELIMINARY PRESENTATION;

ALL DISTANCES AND MEASUREMENTS ARE APPROXIMATE IN NATURE AND SUBJECT TO FIELD VERIFICATION.

FTHD-45



APPROVED BY: SIGNATURE: PRINTED NAME:

BASEBALL COMPLETE COLOR NAME: WHITE PANTONE COLOR NUMBER: WHITE



GREEN FIELDTURF 22,122 sq.ft.



TOTAL FIELDTURF 38,771 sq.ft.

FIELD LAYOUT NOTES:

I. BASEBALL MARKINGS ARE 3" WHITE NCAA STANDARDS.

FIELD DOMINANCY IS ONLY WITHIN THE FOOTBALL FIELD OF PLAY

ALL DIMENSIONS TO BE VERIFIED BEFORE ANY CONSTRUCTION BEGINS.

BASEBALL NEW MEXICO JR COLLEGE HOBBS, NM

NCAA STANDARDS

RESOLUTION

Terry L. Fortner

WHEREAS, Terry L. Fortner, being one of the Staff Members of New Mexico Junior College, has faithfully served the College for twenty years; and
 WHEREAS, Terry L. Fortner has served as Security Personnel from 1997 to 2015; and
 WHEREAS, Terry L. Fortner has served as Custodian from 1995 to 1997; and
 WHEREAS, Terry L. Fortner was selected as the 2006 Meritorious Maintenance/Security Staff Award of the Year; and
 WHEREAS, Terry L. Fortner has served on various committees at New Mexico Junior College and in the community; and

WHEREAS, Terry L. Fortner has been a devoted, enthusiastic and loyal staff member at New Mexico Junior College; and

WHEREAS, Terry L. Fortner as a staff member, has always reflected a favorable image for New Mexico Junior College; and

WHEREAS, Terry L. Fortner has elected to retire the 1st day of November 2015.

NOW, THEREFORE BE IT RESOLVED that New Mexico Junior College desires to give special recognition and appreciation to **Terry L. Fortner** for his service and dedication to New Mexico Junior College.

ADOPTED THIS 19th day of November 2015.

New Mexico Junior College Board Chairperson

ATTEST:

TEST. 1965

New Mexico Junior College Board Secretary