Operating Procedures
Center for Arthropod Management Technologies (CAMTech)
NSF Industry/University Cooperative Research Center
Approved 11-5-17

ARTICLE I - INTRODUCTION

1.1 The following operating procedures will be used to govern the Center for Arthropod Management Technologies (CAMTech), a National Science Foundation (NSF) Industry/University Cooperative Research Center (I/UCRC).

1.2 The operating procedures are approved by the Directors’ Board (consisting of the center director and the site directors for each site) and the Industrial Advisory Board (IAB). The operating procedures can be amended at any time by an affirmative vote of two thirds of the Directors’ Board and two thirds of the members of the Industrial Advisory Board. These operating procedures are intended to be flexible and to change with the needs of the center.

1.3 The CAMTech is a multiple university consortium comprised of the following affiliated participating universities/sites:

- Iowa State University, Ames, IA
- University of Kentucky, Lexington, KY

Iowa State University is the lead university of CAMTech. Additional universities may join the center as specified in Article XIII below.

1.4 These operating procedures form a part of the membership agreement (Appendix I) with participating members. If there are any inconsistencies between the operating procedures and the membership agreement, the terms and conditions outlined in the membership agreement take precedence over the operating procedures provided the inconsistent terms of the membership agreement have been approved by two thirds of the Directors’ Board and two thirds of the IAB.

ARTICLE II - DEFINITIONS

- University(s) or participating / affiliated university(s) means universities collaborating in the center.
- Member(s) means member companies, member corporations including non-profit organizations, commodity associations and institutions, or member government organizations.
- Sponsor means NSF.
- Shared Research means projects funded by members with results shared among the members of the center.
- Research means shared research. All research performed within CAMTech is shared research.
• Center means CAMTech.
• Mentor is a technical sponsor who oversees a center research project. A mentor may be a member of the IAB or another employee from the member organization.

ARTICLE III - PURPOSE

Vision Statement

3.1 The CAMTech will conduct industry-relevant fundamental research to facilitate strategies for management of arthropod and nematode pests.

Mission Statement

3.2 The mission of the CAMTech is:

• To conduct pre-competitive research and transfer knowledge to members for in-house use;
• Optimize and extend the versatility of current arthropod and nematode management technologies;
• Train personnel for potential future employment within industry.

Research Focus

3.3 CAMTech research topics will focus on the needs of the members and the capabilities of the universities.

ARTICLE IV – MEMBERSHIP

4.1 A company, corporation, government organization, or other organization becomes a member upon executing the membership agreement (Appendix I) and Non-disclosure agreement (NDA; Appendix II) and paying the membership fee.

4.2 A company, corporation, government organization, or other organization may support the center with at most two voting memberships.

4.3 The CAMTech membership fees will be used to support center research. The membership fee for for-profit organizations is $50,000 per year in Phase I. To account for normal increases in costs associated with running the center (e.g., student wages, tuition, etc.) and the reduced funding from NSF over time, the cost of membership will increase by $5,000 for each Phase of NSF funding. The membership fee for non-government, non-profit organizations will be considered on a case-by-case basis.

4.4 New members will have access to all information on projects previously funded by the center.

4.5 A site university that receives and uses membership fees will provide a cost share match to support center research by limiting the university overhead rate to a maximum of 10 percent on member’s cash fees in accordance with the requirements of the National Science Foundation I/UCRC program solicitation.
4.6 An in-kind membership is possible upon approval by the center director, all university site directors, and two thirds of the IAB. A member organization that provides in-kind membership fees in lieu of cash payments will provide a list of categorized items to be considered as its in-kind support for approval. The value of in-kind payments will be based on fair market value. In-kind memberships must be reviewed and approved on an annual basis.

4.7 All members will sign the same membership agreement (Appendix I) and associated NDA (Appendix II) unless otherwise approved by the center director and lead site for non-substantive changes, or by the center director, all university site directors, the NSF I/UCRC program management and two thirds of the representatives of the IAB for substantive changes.

ARTICLE V- ORGANIZATION

5.1 Members paying membership fees and the members providing in-kind membership fees will each have one representative on the IAB. An organization may have at most two center memberships and will be entitled to have one voting representative on the IAB for each paid membership.

5.2 The IAB will select a chair and a secretary (chair-elect) for a two-year term at the Inaugural IAB meeting, and every two years thereafter.

5.3 All members will participate in the strategic planning of the center. The IAB will assist the participating faculty in identifying pre-competitive, industry-related research projects; recommend research projects for future work; assist the center director and site directors in identifying new members; review the research and educational accomplishments of the center; and recommend restructuring and/or redirecting of on-going programs to meet IAB needs and concerns.

5.4 The center director will be responsible for all center activities and will report directly to his/her dean at the lead university.

5.5 The site directors will be responsible for center activities at their university and will report directly to their respective university administrators and to the center director for purposes of center business. The site directors will provide liaison between the center and the appropriate academic departments of the member universities.

5.6 Project principal investigators will manage specific research projects funded by the center and will report directly to their respective site directors for matters related to center funded activities, their respective university administrators; and, will provide regular reports to the members supporting their projects (see 7.3). Project principal investigators will be identified in specific project proposals.

5.7 Each site director will be chosen by the participating university.

5.8 A center external assessment coordinator, appointed by the National Science Foundation, will assist the center director, site directors, and the Industrial Advisory Board to organize the center and provide an independent assessment of the operation. The center external assessment
coordinator will report directly to the I/UCRC program manager at the National Science Foundation.

5.9 *University policy committee:* The center will form an administrative oversight and policy committee consisting of relevant university administrators at each participating university to resolve center administrative issues, including review of academic standards, recruitment strategies, retention issues, funding issues, space requirements, and equipment requirements related to the center. This committee will encourage faculty recognition for participation in the center in tenure and promotion decisions, and will promote research that is appropriate for graduate education.

5.10 *Administrative support staff:* The lead university and each participating university will provide a reasonable level of clerical and accounting support for the operation of the center. Administrative staff will maintain the center website including documents accessible to IAB members by password.

**ARTICLE VI- ADMINISTRATION**

6.1 The center director and site directors will work with the Industrial Advisory Board on strategic plans for the center and on recruiting new members.

6.2 The center director in cooperation with the site directors will submit an annual operating and research budget to the IAB for review and recommendations. This will be available for review prior to the fall IAB meeting each year.

6.3 Upon recommendation of the Industrial Advisory Board the center and site directors will authorize the use of membership fees by the project principal investigators in support of center research.

6.4 The site directors will work with the appropriate departments on recruiting graduate students for the center and will set standards for student participation; monitor student progress; set goals for recruiting students (especially minorities and women); promote the multidisciplinary nature of the research program.

6.5 Each CAMTech student (undergraduate, graduate, and/or postdoctoral) will have a center faculty mentor from his or her institution. The faculty mentor is responsible for advising the student on university, departmental, and center policies.

**ARTICLE VII- REPORTS AND INTERACTIONS**

7.1 The center director shall provide at least an annual report to the members and to the National Science Foundation. This report will be available in electronic form for download over the Internet through a protected login interface.

7.2 For each project funded within the center, principal investigators shall provide an I/UCRC project description with technical objectives and milestones to the members at the beginning of the project.
7.3 For each project funded within the center, principal investigators shall provide a written quarterly report to the center director, which will be forwarded to IAB members and project mentors (see 9.4 below).

7.4 Interim project reports shall be provided to mentors via regular teleconference briefings or short written reports. The form and frequency of reports for each project shall be coordinated by the principal investigators and the project mentors. Presentations will be provided to mentors for review at least 48 hours prior to videoconferences.

7.5 All administrative issues, concerns or conflicts regarding the activities of research and reporting are responsibilities of the center director.

7.6 All reports will be provided to members as pdf files and will be marked ‘confidential’.

ARTICLE VIII- MEETINGS

8.1 The center director, site directors and the IAB chair in consultation with the center assessment coordinator and in accordance with NSF guidelines, will establish the schedule of activities and meetings for the center as well as the agenda for the twice yearly research review meetings.

8.2 The participating universities and IAB members for CAMTech will meet twice a year (spring and fall) to review research results, propose projects, review budgets, and discuss strategic plans for the center. The participating universities will host the center meetings on a rotating basis with the date and location determined at the previous IAB meeting.

8.3 A member may send more than one representative to the IAB meetings, but will only have one voting representative per paid membership.

8.4 Meeting agendas are provided at least two weeks in advance of each meeting. Minutes for open and closed IAB sessions will be taken by the secretary of the IAB and distributed to the IAB and center assessment coordinator after the meeting. All documents will be supplied as pdf files and marked confidential.

8.5 Center meetings are closed to the public because of proprietary information that will be discussed. Attendance is limited to faculty, staff, postdoctoral fellows, and students affiliated with the center; representatives of center members; and the NSF-appointed center assessment coordinator and other NSF personnel. Prospective members and university affiliates may attend by invitation of the center director and must sign a CAMTech non-disclosure agreement (Appendix II). Prospective members may attend a maximum of two IAB meetings.

ARTICLE IX- RESEARCH PROJECT SELECTION PROCEDURE

9.1 Proposed new projects are reviewed annually by the IAB. On project decisions, each IAB member is allocated voting points (one per $1,000 of the membership payment) with which to influence project selection and resource allocation priorities. Voting points may be distributed across sites
and projects in any manner that the member selects, from all points on one project to some points on many or all projects. Projects with the most voting points will be selected for funding irrespective of center site. Project budgets may be adjusted slightly on the basis of available funds.

9.2 The research projects are conducted by students (undergraduate, graduate, and/or postdoctoral), technical staff and faculty at one or more of the participating universities.

9.3 All center members may participate in the selection and evaluation of research projects. Individual organizations may acquire up to two voting center memberships, and therefore will have a corresponding number of voting points.

9.4 Each funded project will have a minimum of two mentors / technical sponsors from member institutions.

9.5 Members may propose general industry-oriented research topics of interest for consideration. Faculty members from participating institutions may submit ideas for potential inclusion as areas of emphasis in the Request for Applications. A short list of relevant research topics will be compiled based on the interest of the members. Each participating university will develop a set of pre-proposals consistent with the interest of the members, and the mission of the center. PIs of top-ranked pre-proposals will be invited to submit a full proposal. The proposals will be distributed to the IAB and posted on the center secure web site prior to the fall IAB meeting. At the research review meeting, faculty/student teams will discuss their proposals with IAB members.

9.6 When the required expertise falls outside of CAMTech, research may be conducted by invitation at sites outside of the center. In this case, researchers must abide by the terms of the membership agreement, the NSF and the operating procedures outlined herein. Individual researchers typically only receive such a center sub-award once.

ARTICLE X - PUBLICITY

10.1 A member shall not use the name of any participating university in any publicity, advertising or news release without the prior written approval of an authorized representative of the affected university. Likewise, no participating university may use the name of a member in any publicity without the prior written approval of the member. Press releases will be coordinated between the center director and participating university press office. Notwithstanding the foregoing the parties may satisfy any reporting requirements of their respective organizations and of NSF.

10.2 Subject to the recommendations of the IAB, the center director shall post descriptions of all CAMTech-funded research projects on the center website. The descriptions shall not contain confidential or proprietary information and may be published freely.

ARTICLE XI - PUBLICATIONS

11.1 Researchers engaged in CAMTech research shall be permitted to disclose the methods and results of their research after a review by the members for proprietary materials as outlined in the
membership agreement (Appendix I). The requirement for review by members prior to public disclosure ends following member review of the final quarterly report of the project funding period.

11.2 In accordance with the membership agreement, Universities reserve the right to publish center information arising out of or resulting from shared research. The notice of intention to publish along with the manuscript will be sent to the primary contact for each member and posted to the secure center website. University publication rights remain as per the membership agreement.

11.3 Center data that have been approved for public disclosure may be used in additional publications or forums without additional permission.

11.4 The following statement acknowledging CAMTech support should be used for any publication of research based on or developed with CAMTech support: “This material is based upon work supported by the National Science Foundation I/UCRC, the Center for Arthropod Management Technologies under Grant No. IIP-1338775 and by industry partners.”

ARTICLE XII- BENEFITS

12.1 All members will have non-exclusive rights to the entire CAMTech shared research portfolio under the conditions outlined in the membership agreement and these operating procedures.

12.2 All members will have an opportunity to directly contribute to CAMTech research and education programs by serving as industrial mentors and/or thesis committee members as appropriate and consistent with the policies and procedures of participating universities.

12.3 All members will have an opportunity to propose specific research problems, and focus areas for research.

12.4 Information transfer between the faculty/student research teams and members will be promoted by: direct involvement of the industrial advisor on the research team; submission of reports; and research presentations to members.

12.5 Each member that joins the center by paying a cash membership fee will vote anonymously on the selection of research projects supported by membership fees. They will also be eligible to vote on all other center matters and participate in the evaluation and discussion of research projects.

12.6 Each member that joins the center on an approved in-kind basis will also have voting rights as outlined in 12.5, if approved by two-thirds of the cash paying membership.

ARTICLE XIII- NEW UNIVERSITY AFFILIATES AND INDUSTRIAL MEMBERS

13.1 From time to time, new universities may request membership in the CAMTech as an affiliated site. Each new university requesting membership shall initially obtain concurrence from the center director, site directors, and the I/UCRC program manager at the National Science Foundation prior to submitting a letter of intent to join to CAMTech. Universities requesting membership as a
participating university must demonstrate their ability to perform synergistic research within the focused research areas of the center and their willingness to work within the structure, policies and procedures of CAMTech. Upon concurrence by the center, including the approval of a majority of the IAB, the new university requesting membership as a participating university may continue its application following the applicable procedures of the current National Science Foundation I/UCRC program solicitation.

13.2 A new university requesting membership into CAMTech shall review their research objectives and program plans, and obtain and submit within their planning grant proposal a letter of support from the site director at each of the current center university members and from the IAB chair.

13.3 From time to time, new companies, corporations, or organizations may request, or be invited, to join CAMTech as a member. These new companies, corporations, or organizations may join CAMTech upon signature of the existing membership agreement and associated NDA (Appendix II), acceptance of the current operating procedures, and payment of the non-prorated annual membership fee.
APPENDIX I.

Industry/University Cooperative Research Center
Center for Arthropod Management Technologies
Membership Agreement

This Agreement is made...........this day of ...... by and between Iowa State University of Science
and Technology (hereinafter called "UNIVERSITY") and … (hereinafter called "Company") for
the Center comprising and acting through the Center for Arthropod Management Technologies
(CAMTech), which is defined as all CAMTech Research Sites funded by the Industry/University
Cooperative Research Center Program of the National Science Foundation.

WHEREAS, the parties to this Agreement intend to join together in a cooperative effort to
support an Industry/University Cooperative Research Center for Arthropod Management
Technologies (hereinafter called "CENTER") led by the UNIVERSITY to maintain a mechanism
whereby the UNIVERSITY environment can be used to perform research toward optimizing the
efficacy of arthropod pest management, and training of research personnel.

WHEREAS, the University of Kentucky Research Foundation and UNIVERSITY have entered
into an Inter-Institutional Agreement, in a cooperative effort to establish and support the
CENTER, and the CENTER intends to maintain a mechanism whereby the CENTER
environment can be used to perform research for the CENTER at the University of Kentucky
Research Foundation, ISU, and/or future universities (hereinafter collectively called the
“Collaborating Universities”) in the area of CAMTech.

The parties hereby agree to the following terms and conditions:

A. CENTER will be operated by certain faculty, staff and students at the UNIVERSITY and
other Research Sites at the other Collaborating Universities. For the first five years, the CENTER
will be supported jointly by industrial firms, the National Science Foundation (NSF), and the
Collaborating Universities. It is possible that the UNIVERSITY may receive support from NSF
for an additional ten years.

B. Any COMPANY, Federal Research and Development organization, or any Government-
owned Contractor Operated laboratory may become a sponsor of the CENTER, consistent with
applicable state and federal laws and statutes.

C. COMPANY agrees to contribute $50,000 annually in support of the CENTER and thereby
becomes a member. Payment of these membership fees shall be made to Iowa State University as
a lump sum effective ____; or in four equal quarterly installments on ____ , ____ , ____ and ____
of each year of sponsorship. Checks from COMPANY should be mailed to ISU at Sponsored
Programs Accounting, 3609 Administrative Services Building, Ames, IA 50011-3609, and made
payable to Iowa State University with a note in the memo section indicating the payment is for
CAMTech membership. Because research of the type to be done by the CENTER takes time and
research results may not be obvious immediately, COMPANY should join CENTER with the
intention of remaining a fee paying member for at least two years. However, COMPANY may
terminate this Agreement by giving UNIVERSITY 90 day’s written notice prior to the termination date.

D. There will be an Industrial Advisory Board composed of one representative from each member. This board makes recommendations on (a) the research projects to be carried out by CENTER (b) the apportionment of resources to these research projects, and (c) changes in the CENTER Operating Procedures.

E. UNIVERSITY reserves the right to publish in scientific journals the results of any research performed by CENTER. COMPANY, however, shall have the opportunity to review any paper or presentation containing results of the research program of CENTER prior to publication of the paper, and shall have the right to request a delay in publication for a period not to exceed 30 day(s) from the date of submission to COMPANY, for proprietary reasons, provided that COMPANY makes a written request and justification for such delay within 30 days from the date the proposed publication is submitted to COMPANY.

F. All patents derived from inventions conceived or first actually reduced to practice in the course of research conducted by the CENTER shall belong to UNIVERSITY and / or other relevant University Research Site. These universities, pursuant to chapter 18 of title 35 of the United States Code, commonly called the Bayh-Dole Act, will have ownership of all patents developed from this work, subject to "march-in" rights as set forth in this Act.

G. UNIVERSITY agrees that all such CENTER sponsors are entitled to a nonexclusive royalty-free license during its period of membership. COMPANY will have the right to sublicense its subsidiaries and affiliates. COMPANIES that wish to exercise rights to a royalty-free license agree to pay their pro-rata share of reasonable costs of protecting the intellectual property, including patent filing, prosecution and maintenance. COMPANIES that were members at the time of disclosure of the intellectual property and wish to exercise rights to a royalty-free, non-exclusive license agreement for any patented intellectual property shall notify CENTER in writing within sixty (60) days of receiving notice that the intellectual property is available for license, and the COMPANIES shall pay all allocated costs of obtaining patent protection.

H. If only one COMPANY seeks a license, that COMPANY may obtain an exclusive fee-bearing license through one of its agents. COMPANY has the right to sublicense its subsidiaries and affiliates.

I. Any royalties and fees received by a Collaborating University under this Agreement, over and above expenses incurred, will be distributed according to that university’s royalty distribution policy, with the understanding that 33% will accrue to the CENTER operating account, or to the relevant Collaborating University in the event that CENTER is no longer in operation.

J. Neither party is assuming any liability for the actions or omissions of the other party. Each party will indemnify and hold the other party harmless against all claims, liability, injury, damage or cost based upon injury or death to persons, or loss of, damage to, or loss of use of property that arises out of the performance of this agreement to the extent that such claims, liability, damage, cost or expense results from the negligence of a party's agents or employees.
K. Any official notice, invoice, and other correspondence between the parties under this Agreement shall be in writing and delivered by no less than First Class U.S. Mail service or facsimile transmission addressed to the other party's administrative contact as follows:

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<tr>
<th>COMPANY</th>
<th>CAMTech Administrative</th>
<th>ISU: Business Matters</th>
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<tr>
<td>Name</td>
<td>Dr. Bryony Bonning</td>
<td>Industry Contracts-OIPTT</td>
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<td>Title</td>
<td>Director, CAMTech</td>
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<td>Address</td>
<td>339 Science II</td>
<td>310 Lab of Mechanics</td>
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<td>Ames, IA 50011</td>
<td>Ames, IA 50011</td>
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<td>Phone</td>
<td>515-294-0150</td>
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<td>Fax</td>
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<tr>
<td>Email</td>
<td><a href="mailto:camtech@iastate.edu">camtech@iastate.edu</a></td>
<td><a href="mailto:industry-contracts@iastate.edu">industry-contracts@iastate.edu</a></td>
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IN WITNESS WHEREOF, UNIVERSITY and COMPANY have caused this Agreement to be executed by their duly authorized officials, to be effective as of the Sponsorship Effective Date indicated below COMPANY’s signature, which day and month in subsequent years in which COMPANY adheres to the terms of this Agreement shall be called the anniversary date of this Agreement.

COMPANY: <Company name>

_________________________ /________
Name: Bryony Bonning Date
Title: Professor and Director, CAMTech

IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY

Read and understood: Agreed and accepted:

_________________________ /________  __________________________ /________
Name: Bryony Bonning Date Name: Date
Title: Professor and Director, CAMTech Title: Industry Contracts-OIPTT

Date Sponsorship is to Become Effective:

☐ October 1, 20__  ☐ January 1, 20__  ☐ April 1, 20__  ☐ July 1, 20__
APPENDIX II

CAMTECH I/UCRC
NON-DISCLOSURE AGREEMENT

This Agreement is effective as of the date of the last signature to this Agreement (“Effective Date”) and is by and between Iowa State University of Science and Technology, located at 1138 Pearson Hall, Ames, Iowa 50011, and The University of Kentucky, located at 144 ASteCC Building, Lexington, KY 40506, together (“University”) and [insert company names and address] (“Company”); (Company and University each a “Party” and together the “Parties”).

WHEREAS, University and Company, through its membership in the Center for Arthropod Management Technologies (CAMTECH) Industry-University Cooperative Research Center administered by the Iowa State University Department of Entomology (“IUCRC”), are interested in furthering the research funded by the IUCRC members (“Purpose of Disclosure”) that may require University to disclose proprietary and confidential information concerning research activities of the IUCRC.

NOW, THEREFORE, the Parties agree to the following terms and conditions:

1. “Confidential Information” shall mean any and all information, know-how or data disclosed or provided by University to Company about the research activities of the IUCRC, whether disclosed or provided in oral, written, graphic, photographic, electronic or any other form except for information:
   a. that is or becomes generally known or available to the public without breach of this Agreement;  
   b. that is known to Company at the time of disclosure, as evidenced by written records of Company; 
   c. that is independently developed by Company, as evidenced by written records of Company; or  
   d. that is disclosed to Company in good faith by a third party who has an independent right to such subject matter and information.

2. Should Company be required by law to disclose Confidential Information, Company shall immediately inform University in writing and cooperate with University in responding to such requirement in a manner that maintains the confidentiality of Confidential Information to the maximum extent possible.

3. Company shall hold in confidence and not disclose any and all Confidential Information to any third party, and shall use Confidential Information solely for the Purpose of Disclosure. Company shall have the right to disclose Confidential Information to employees or agents of its organization (“Representatives”) provided that Company causes such Representatives to be bound to the terms of this Agreement.

4. Unless otherwise specified in writing, all Confidential Information remains University’s property. Upon request of University, Company shall return or destroy all Confidential Information received from University, except for one copy, which Company may keep solely to monitor its obligations under this Agreement.

5. This Agreement shall remain in effect as long as the company is a fee paying member of the IUCRC.
6. All Confidential Information shall be held confidential by Company for three (3) years after such information is disclosed to Company.

7. Nothing contained in this Agreement shall be construed as an obligation to enter into any further agreement concerning the Project or Confidential Information, or as a grant of a license to the Confidential Information or to any patent or patent application existing now or in the future.

8. Company shall have no right to use University’s name, trademarks or trade names in any communications, including website content, without University’s prior written consent.

9. This Agreement shall be the entire understanding between the Parties with respect to the subject matter hereto and shall supersede all prior written or non-written agreements.

10. This Agreement shall remain in effect as long as the Company remains a member of the IUCRC.

11. Facsimile or pdf copies will be accepted by both parties as originals.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their respective authorized representatives.

Iowa State University of Science and Technology

By: ________________________/_______ __   _______________________/_________
Name: Lynne Mumm    Date         Name: Bryony Bonning Date
Title: Senior Negotiator - OIPTT   Title:  Director, CAMTECH

The University of Kentucky

By: ________________________/_______ __   _______________________/_________
Name:      Date         Name:   Date
Title:     Title:

Company

Authorized Company Official:

By: ________________________/_______
Name:            Date
Title: