



## Ultra-Efficient Engine Technology





**UEET**  
**Ultra-Efficient Engine Technology**

**Participant Agreement**

I am a NASA employee, contractor, other government employee, university employee, graduate student or other invited participant working on-site at a NASA Center, and I am now, or expect to be, participating in the NASA Ultra-Efficient Engine Technology Project.

I have attended the Intellectual Property Management Briefing and hereby under my responsibilities agree to exert reasonable efforts to protect proprietary, LER, Space Act Agreements, and other sensitive information generated in this program from unauthorized disclosure to non-UEET participants as described in the Intellectual Property Management Handbook.

(Please PRINT and complete this form in full. Thank you.)

\_\_\_\_\_  
Name (Last, First, Middle Initial)

\_\_\_\_\_  
Company/University/Government Affiliation

\_\_\_\_\_  
Org. Code

\_\_\_\_\_  
Mailing Address

\_\_\_\_\_  
Primary Technology Area or WBS Facility

\_\_\_\_\_  
Mail Stop

Do you require Livelink access?  
(Information Management System)  YES

\_\_\_\_\_  
City, State, ZIP Code

\_\_\_\_\_  
Business Phone

\_\_\_\_\_  
Fax

\_\_\_\_\_  
E-mail Address

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**For Official Use Only:**  
UEET Project/Subproject Manager      IPO Briefing Date:  
UEET Intellectual Property Officer



<b>DECISION MATRIX</b>		
<b>Data Rights Protection Mechanism</b>	<b>NASA, On-site PCB and/or on-site University Contractor or Grantee Developed</b>	<b>Industry or Academia Developed</b>
Classified	Mark as classified	Mark as classified
Proprietary		Mark as proprietary
Export controlled under ITAR or EAR	Mark export controlled under ITAR or EAR	Mark export controlled under ITAR or EAR
Based on or containing previously protected information (Proprietary, LER, or SAA-, CA- or SBIR-protected)	Mark as ACI	Mark as based on or containing protected information
Developed under Non-reimbursable Space Act Agreement (SAA) and considered "proprietary"	Mark as SAA protected	Mark as proprietary
Developed under Cooperative Agreement (CA) and considered "proprietary"	Mark as CA protected	Mark as CA protected
Developed under Small Business Innovation Research (SBIR)		Mark as SBIR protected
Developed under grant		Generally public domain
No protection mechanism applicable	Public domain	Public domain



**UEET**  
**Ultra-Efficient Engine Technology**

**Non-Disclosure Agreement**

WHEREAS, the Ultra-Efficient Engine Technology (UEET) Program of the National Aeronautics and Space Administration (NASA), an agency of the federal government of the United States of America, has provided design information **[Describe what is being provided and how]**, hereinafter the "Information" and

WHEREAS, the **[Name of the recipient]**, hereinafter "Recipient," desires to use the information for the purposes of **[Description of purpose]**;

NOW THEREFORE, in consideration of the UEET Office disclosing then to Recipient and granting Recipient the right of use such information for the stated purposes, Recipient agrees as follows:

(Please PRINT and complete this form in full. Thank you.)

\_\_\_\_\_  
Name (Last, First, Middle Initial)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company/Agency Association

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State, ZIP Code

\_\_\_\_\_  
Business Phone

\_\_\_\_\_  
E-mail Address

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
NASA UET IPO Signature

\_\_\_\_\_  
Date



**UEET**  
**Ultra-Efficient Engine Technology**

**Non-Disclosure Agreement - Completed**

WHEREAS, the Ultra-Efficient Engine Technology (UEET) Program of the National Aeronautics and Space Administration (NASA), an agency of the federal government of the United States of America, has provided design information for the Dual Spool Turbine Facility (DSTF), hereinafter the "Information" and

WHEREAS, Honeywell, hereinafter "Recipient," desires to use the information go the purposes of identifying any design, performance, operational, and/or safety issues at the Preliminary Design Review (PDR):

NOW THEREFORE, in consideration of the UEET Office disclosing then to Recipient and granting Recipient the right of use such information for the stated purposes, Recipient agrees as follows:

Recipient shall hold the Information in-trust and confidence, shall use it only for the stated purposes, and shall not disclose the Information in whole or in part persons not involved with the Recipient, nor to any person of the Recipient not directly assigned to activities furthering the stated purposes. Recipient affirmatively represents that he/she is a United States citizen or permanent resident.

(Please PRINT and complete this form in full. Thank you.)

Walterschied, Peter R. ■

Name (Last, First, Middle Initial)

Principle Engineer

Title

Honeywell Company

Company/Agency Association

P>O Box 5281

Address

Phoenix, AZ 85072-2181

City, State, ZIP Code

(602) 231-7579

peter.walterscheid@honeywe.com

Business Phone

E-mail Address

*Peter R. Walterscheid*

April 19, 2002

Signature

Date

*Diane M. Cahpman*

April 22, 2002

NASA UET IPO Signature

Date



**UEET**  
Ultra-Efficient Engine Technology

**Foreign Person Approval - University**

\_\_\_\_\_  
**Name (Last, First, Middle Initial)**

\_\_\_\_\_  
**University Association**

\_\_\_\_\_  
**Country of Citizenship**

\_\_\_\_\_  
**Business Mailing Address**

\_\_\_\_\_  
**Passport No.**

\_\_\_\_\_  
**City, State, ZIP**

\_\_\_\_\_  
**Primary Technology Area**

\_\_\_\_\_  
**Business Phone (Extension)**

\_\_\_\_\_  
**Fax**

\_\_\_\_\_  
**Contract/Grant Principal Investigator**

\_\_\_\_\_  
**E-mail Address**

\_\_\_\_\_  
**NASA Contract/Grant Number**

**Justification (attach Risk Assessment):**

\_\_\_\_\_  
**For Official Use Only:**

\_\_\_\_\_  
**Risk Assessment Date**

\_\_\_\_\_  
**UEET Project Manager**

\_\_\_\_\_  
**UEET Subproject Manager**

### Foreign Person Approval - University Completed

Zhou, Xu

Name (Last, First, Middle Initial)

China

Country of Citizenship

145241007

Passport No.

PIA/Analysis methods for multifunctional structures

Primary Technology Area

Prof. A Chattopadhyay

Contract/Grant Principal Investigator

NAG-1-2283

NASA Contract/Grant Number

Arizona State University

University Association

Box 871603

Business Mailing Address

Tempe, Arizona 852-87-1603

City, State, ZIP

(480) 965-2434

Business Phone (Extension)

N/A

Fax

xuzhou@imap4.asu.edu

E-mail Address

Justification (attach Risk Assessment):

The student will be working on a structural analysis method in support of the UEET active shape control effort. This effort is at a fundamental level and is not specific to any particular aircraft (flat plate demonstration only). The effort is anticipated to last 2-3 years.

Risk Assessment: The student could have access to the developed software; however, the software would not be able to be validated against any configuration.

The student will not have access to any sensitive, classified or proprietary information through his work on the UEET project. The student will not be allowed to participate in any UEET annual review meetings.

**For Official Use Only:**

Risk Assessment Date July 5, 2000

Robert J. Shaw

UEET Project Manager

James L. Pittman

UEET Subproject Manager

**Foreign Person Approval - Industry**

\_\_\_\_\_  
**Name (Last, First, Middle Initial)**

\_\_\_\_\_  
**Company Name**

\_\_\_\_\_  
**Country of Citizenship**

\_\_\_\_\_  
**Business Mailing Address**

\_\_\_\_\_  
**Passport No.**

\_\_\_\_\_  
**City, State, ZIP**

\_\_\_\_\_  
**Primary Technology Area**

\_\_\_\_\_  
**Business Phone (Extension)**

\_\_\_\_\_  
**Contract/Grant Principal Investigator**

\_\_\_\_\_  
**Fax**

\_\_\_\_\_  
**NASA Contract/Grant Number**

\_\_\_\_\_  
**E-mail Address**

\_\_\_\_\_  
**Justification (attach Risk Assessment)**

**For Official Use Only:**

\_\_\_\_\_  
**NASA Project/Subproject Manager**

**Risk Assessment Date** \_\_\_\_\_

\_\_\_\_\_  
**NASA Program Manager**

\_\_\_\_\_  
**Authorized Company Representative**

### Foreign Person Approval - Industry Completed

Balasubramaniam, Mahadevan

**Name (Last, First, Middle Initial)**

INDIA

**Country of Citizenship**

VO72232

**Passport No.**

UEET - Systems Integration

**Primary Technology Area**

Fred Lraise/Ron Plybon

**Contract/Grant Principal Investigator**

NAS3-00135

**NASA Contract/Grant Number**

**Justification (attach Risk Assessment)**

Dr. Balasubramaniam is a GE employee at our Corporate Research and Development center. His application for permanent resident status is under way and being sponsored by GE. His Ph.D. is from MIT and he has been involved in tool development activities at CR&D that are directly related to the high-fidelity simulation effort for the UEET program. Utilizing his skill would benefit this program as well as benef GE in the longer term application of these tools. Not having him work on this program will result in a less capable and experienced person working the tool development, integration and validation and make it less likely that the work will result in long-term benefit to GE. Risk Assessment - Dr. Balasubramaniam is already working with and developing similar tool at CR&D. He is actively working to become a permanent U.S. resident and we expect this to be completed during this contract. This is minimal additional risk of technology export from his participation in the UEET high-fidelity multi-component simulation activity.

GE Global Research Center

**Company Name**

K1-2A71, One Research Circle

**Business Mailing Address**

Niskayuna, NY 12309

**City, State, ZIP**

518-387-5216

**Business Phone (Extension)**

518-387-5459

**Fax**

balasuma@crd.ge.com

**E-mail Address**

#### For Official Use Only:

Robert M. Plencner

**NASA Project/ Subproject Manager**

Robert J. Shaw

**NASA Program Manager**

**Risk Assessment Date** March 2, 2002

Fred M. Krause

**Authorized Company Representative**



## **SENSITIVE INFORMATION MARKING PROCEDURES**

<b>Limited Exclusive Rights (LER)</b>	<b>page 2</b>
<b>Administratively Controlled Information</b>	<b>page 3</b>
<b>International Traffic in Arms Regulations (ITAR)</b>	<b>page 4</b>
<b>Export Administration Regulations (EAR)</b>	<b>page 5</b>
<b>Space Act Agreement (SAA)</b>	<b>page 6, 7</b>
<b>Cooperative Agreement (CA)</b>	<b>page 8, 9</b>
<b>Small Business Innovation Research (SBIR)</b>	<b>page 10</b>
<b>Multiple Sensitive Information Types</b>	<b>page 11</b>

### 3.3.2.1 Limited Exclusive Rights (LER)

In the event an industry or academia partner creates any new information which either (1) contains LER information in such a manner the LER information cannot be segregated from the new information, or (2) is based upon LER information in such a manner that the LER information could be derived from the new information, the new information will be preceded by a cover page marked in bold with the following notice:

(Complete Notice)

#### **CONTAINS LIMITED EXCLUSIVE RIGHTS INFORMATION NOTICE**

**This document contains information that cannot be segregated from or this information could be used to derive, Limited Exclusive Rights (LER) data, which are subject to limited exclusive rights under Government Contract No. [Insert contract number under which LER information originated]. This LER-derived information may be; used, duplicated, and disclosed by or on behalf of the U.S. Government for U.S. Government purposes only with the express imitation that any release r disclosure for U.S. Government purposes are to be made subject to disclosure conditions that protect and preserve its limited exclusive rights. These limited exclusive rights shall be in effect until [Insert date on which LER status expires]. No other disclosure and use of this information is authorized without the written permission of both the U.S. Government and the LER Information Originator. This notice shall be marked on any reproduction of this information, in whole or in part.**

Individual page, viewgraphs, etc., which contain new information, developed by an industry or academia partner that cannot be segregated from or that my be used to derive, LER information will be marked in bold with the following notice:

(Shortened Notice)

#### **CONTAINS LIMITED EXCLUSIVE RIGHTS INFORMATION**

**This document contains information that cannot be segregated from or this information could be used to derive, Limited Exclusive Rights (LER) information, which are subject to limited exclusive rights under Government Contract No. (Insert contract number under which LER information originated)].**

**These limited exclusive rights shall be in effect until [Insert date on which LER status expires]**

### 3.3.2.2 Administratively Controlled Information

Information developed by NASSA personnel, on-site PBC's or on-site university contractors and grantees which contains or is based on proprietary, LER, protected Space Act Agreement (SAA) or Cooperative Agreement (CA), or Small Business Innovation and Research (SBIR) information in such a manner that the new information cannot be segregated from, or that may be used to derive, the protected information, will be preceded by a cover page marked in bold with the following notice:

(Complete Notice)

**ADMINISTRATIVELY CONTROLLED INFORMATION NOTICE  
AVAILABLE ONLY WITH APPROVAL OF ISSUING OFFICE**

**This document contains or is based upon proprietary, Limited Exclusive Rights, protected Space Act Agreement or Cooperative Agreement, or Small Business Innovation and Research information. The NASA Ultra-Efficient Engine Technology Project Office must approve further dissemination of the document and its contents. This notice shall be marked on any reproduction of the document, in whole or in part.**

**Date for the General Release [insert date on which protection status expires]**

Individual page, viewgraphs, etc., developed by NASA personnel, on-site PBC's or on-site university contractors and grantees which contain new information that cannot be segregated from, or that may be used to derive, proprietary, LER protected Space Act Agreement (SAA) or Cooperative Agreement (CA), or Small Business Innovation and Research (SBIR) information will be marked in bold with the following notice:

(Shortened Notice)

**NASA UEET – ADMINISTRATIVELY CONTROLLED INFORMATION**

**Date for the General Release [insert date on which protection status expires]**

### 3.3.2.3 Export Control

Information that is restricted and limited in its dissemination under the International Traffic in Arms Regulations (ITAR) or the Export Administration Regulations (EAR) will be marked with the following notices whether the information is developed by NASA personnel, on-site PBC's or on-site university contractors and grantees, or by an industry or academia partner.

#### 3.3.2.3.1 International Traffic in Arms Regulations (ITAR)

A cover page marked in bold with the following notice will precede information that is restricted and limited in its dissemination under the International Traffic in Arms Regulations (ITAR):

(Complete Notice)

#### **INTERNATIONAL TRAFFIC IN ARMS REGULATIONS NOTICE**

**This document contains information which falls under the purview of the U.S. Munitions List (USML), as defined in the International Traffic in Arms Regulations (ITAR) 22 CFR 120-130, and is export controlled. It shall not be transferred to foreign nationals in the U.S. or abroad, without specific approval of a knowledgeable NASA export control official, and /or unless an export license/license exception is obtained /available from the United States Department of State. Violations of these regulations are punishable by fine, imprisonment, or both. This notice shall be marked on any reproduction of the information, in whole or in part.**

Individual page, viewgraphs, etc., which are restricted and limited in its dissemination under the International Traffic in Arms Regulations (ITAR) will be marked in bold with the following notice:

(Shortened Notice)

**INTERNATIONAL TRAFFIC IN ARMS REGULATIONS CONTROLLED**

### **3.3.2.3.2 Export Administration Regulations (EAR)**

A cover page marked in bold with the following notice will precede information that is restricted and limited in its dissemination under the Export Administration Regulations (EAR):

(Complete Notice)

#### **EXPORT ADMINISTRATION REGULATIONS NOTICE**

**This document contains information within the purview of the Export Administration Regulations (EAR), 15 CFR 730-744, and is export controlled. It may not be transferred to foreign nationals in the U.S. or abroad without specific approval of a knowledgeable NASA export control official, and/or unless an export license/license exception is obtained/available from the Bureau of Export Administration (BXA), United States Department of Commerce. Violations of these regulations are punishable by fine, imprisonment, or both. This notice shall be marked on any reproduction of this information, in whole or in part.**

Individual page, viewgraphs, etc., which are restricted and limited in its dissemination under the Export Administration Regulations (EAR) will be marked in bold with the following notice:

(Shortened Notice)

**EXPORT ADMINISTRATION REGULATIONS CONTROLLED**

### **3.3.2.4 Space Act Agreement (SAA)**

Information first produced by NASA personnel, on-site PBC's or on-site university contractors and grantees under a Space Act Agreement (SAA) between NASA and an industry or academia partner, that is considered "proprietary", will be preceded by a cover page marked in bold with the following notice:

(Complete Notice)

**NASA SPACE ACT AGREEMENT NOTICE**

**This document contains information developed under U.S. Government Space Act Agreement [Insert SAA number] and is restricted to U.S. Government purposes only. Recipients of this document may further disseminate it only with the approval of the Ultra-Efficient Engine Technology Project, NASA Glenn Research Center, Cleveland, Ohio 44135. This notice will be marked on any reproduction of this information, in whole or in part.**

**Date for General Release [Insert date period of confidence expires]**

Individual pages viewgraphs, etc., which contain NASA personnel, on-site PBC's or on-site university contractors and grantees first produced Space Act Agreement protected information will be marked in bold with the following notice:

(Shortened Notice)

**NASA SPACE ACT AGREEMENT PROTECTED**

**This document contains information developed under U.S. Government Space Act Agreement [Insert SAA number]**

**Date for General Release [Insert date period of confidence expires]**

In the event an industry or academia partner creates any new information which either (1) contains SAA protected information in such a manner that the SAA protected information cannot be segregated from the new information, or (2) is based upon SAA protected information in such a manner that the SAA protected information could be derived from the new information, the new information will be preceded by a cover page marked in bold with the following notice:

(Complete Notice)

**CONTAINS SPACE ACT AGREEMENT PROTECTED INFORMATION NOTICE**

**This document contains information that cannot be segregated from, or this information could be used to derive, Space Act Agreement protected information, which are subject to a period of confidence under U.S. Space Act Agreement [Insert SAA number under which SAA protected information originated]. This SAA protected-derived information may be: used, duplicated, and disclosed by or on behalf of the U.S. Government for U.S. Government purposes only, with the express limitation that any release or disclosure for U.S. Government purposes are to be made subject to disclosure conditions that protect and preserve its Space Act Agreement protection rights. These Space Act Agreement protection rights shall be in effect until [Insert date on which SAA protection status expires]. No other disclosure and use of this information is authorized without the written permission of the Ultra-Efficient Engine Technology Project Office. This notice shall be marked on any reproduction of this information, in whole or in part.**

Individual pages, viewgraphs, etc., which contain new information, developed by an industry or academia partner, that cannot be segregated from, or that may be used to derive, SAA protected information will be marked in bold with the following notice:

(Shortened Notice)

**CONTAINS SPACE ACT AGREEMENT PROTECTED INFORMATION NOTICE**

**This document contains information that cannot be segregated from, or this information could be used to derive, Space Act Agreement protected information, which are subject to a period of confidence under U.S. Space Act Agreement [Insert SAA number under which SAA protected information originated].**

**These Space Act Agreement protection rights shall be in effect until [Insert date on which SAA protection status expires]**

### **3.3.2.5 Cooperative Agreement (CA)**

Information first produced by NASA personnel, on-site PBC's or on-site university contractors and grantees or an industry or academia partner under a Cooperative Agreement (CA) between NASA and a commercial entity, institutions of higher education or a non-profit organization that is considered "proprietary" will be preceded by a cover page marked in bold with the following notice:

(Complete Notice)

#### **NASA COOPERATIVE AGREEMENT NOTICE**

**This document contains information developed under U.S. Government Cooperative Agreement [Insert CA number] and is restricted to U.S. Government Purposes only. Recipients of this document may further disseminate it only with the approval of the ultra-Efficient Engine Technology Project, NASA Glenn Research Center, Cleveland, Ohio 44135. This notice shall be marked on any reproduction of this information in whole or in part.**

**Date for General Release [Insert date period of confidence expires]**

Individual pages, viewgraphs, etc., which contain NASA personnel, on-site PBC's or on-site university contractors and grantees, or industry or academia partner first produced Cooperative Agreement protected information will be marked in bold with the following notice:

(Shortened Notice)

#### **NASA COOPERATIVE AGREEMENT PROTECTED**

**This document contains information developed under U.S. Government Cooperative Agreement [Insert CA number].**

**Date for General Release [Insert date period of confidence expires]**

In the event an industry or academia partner creates any new information which either (1) contains CA protected information in such a manner that the CA protected information cannot be segregated from the new information, or (2) is based upon CA protected information in such a manner that the CA protected information could be derived from the new information, the new information will be preceded by a cover page marked in bold with the following notice:

(Complete Notice)

**CONTAINS COOPERATIVE AGREEMENT PROTECTED INFORMATION NOTICE**

**This document contains information that cannot be segregated from, or this information could be used to derive, Cooperative Agreement protected information, which are subject to a period of confidence under U.S. Government Cooperative Agreement [Insert CA number under which CA protected information originated]. This CA protected-derived information may be: used, duplicated, and disclosed by or on behalf of the U.S. for U.S. Government purposes only, with the express limitation that any release or disclosure of U.S. Government purposes are to be made subject to disclosure conditions that protect and preserve its Cooperative Agreement protection rights. These Cooperative Agreement protection rights shall be in effect until [Insert date on which CA protection status expires]. No other disclosure and use of this information is authorized without the written permission of the U.S. Government and the CA Information Originator. This notice shall be marked on any reproduction of this information, in whole or in part.**

Individual pages, viewgraphs, etc., which contain new information, generated by an industry or academia partner, that cannot be segregated from, or that may be used to derive, CA protected information will be marked in bold with the following legend:

(Shortened Notice)

**CONTAINS COOPERATIVE AGREEMENT PROTECTED INFORMATION NOTICE**

**This document contains information that cannot be segregated from, or this information could be used to derive, Cooperative Agreement protected information, which are subject to a period of confidence under U.S. Government Cooperative Agreement [Insert CA number under which CA protected information originated].**

**These Cooperative Agreement protection rights shall be in effect until [Insert date on which CA protection status expires].**

### 3.3.2.6 Small Business Innovation Research (SBIR)

Under a Small Business Innovation Research (SBIR) contract, a cover page marked in bold with the following notice will precede all information that is produced by the industry partner:

(Complete Notice)

#### **SIBR RIGHTS NOTICE**

**This document contains information with SBIR rights under Contract [Insert SBIR contract number]. For a period of 4 years after acceptance of all items to be delivered under this contract, the Government agrees to use this information for Government purposes only, and they shall not be disclosed outside of the Government (including disclosure for procurement purposes) during such period without permission of the Contractor, except that subject to the foregoing use and disclosure prohibitions, such information may be disclosed for use by support contractors. After the aforesaid 4-year period, the Government has a royalty-free license to use, and to authorize others to use on behalf, this information for Government purposes, but is relieved of all disclosure prohibitions and assumes no liability for unauthorized use of this information by third parties. This notice shall be affixed to any reproductions of this information, in whole or in part.**

**Date for Public Release [Insert date on which SBIR proprietary status expires]**

Individual pages, viewgraphs, etc., which contain information produced by an industry partner under a SBIR contract will be marked in bold with the following notice:

(Shortened Notice)

#### **SIBR RIGHTS NOTICE**

**This document contains information with SBIR rights under Contract [Insert SBIR contract number].**

**Date for Public Release [Insert date on which SBIR proprietary status expires]**

### **3.3.2.7 Multiple Sensitive Information Types**

For information that contains multiple types of sensitive information, all applicable data rights protection mechanisms notices (complete or shortened version) will be placed on the information. The sensitive information will be preceded with a cover page, when possible; containing all of the notices, as well as the individual pages containing sensitive information will be marked with all of the appropriate shortened versions of the notices. When UEET Project developed information is protected by multiple types of data rights protection mechanisms, the sensitive information will not be available for general release until all data rights protection mechanisms have expired. In the event a part of the information is no longer sensitive because its protection period has expired and it can be segregated from the remaining information, that part of the information can be released.