

MEMORANDUM OF UNDERSTANDING
BETWEEN THE
DEPARTMENT OF DEFENSE
OF THE
UNITED STATES OF AMERICA
AND
THE DEPARTMENT OF DEFENCE OF AUSTRALIA
FOR THE LOAN OF
COMPACT AIRBORNE SPECTROGRAPHIC IMAGER-2
(CASI-2)

The Department of Defense (DoD) of the United States of America, hereinafter referred to as the "Receiving Participant," and the Australian Department of Defence, (ADoD), hereinafter referred to as the "Providing Participant," recognizing that the Exchange of Notes Constituting an Agreement between the Government of the United States of America and the Government of Australia Concerning the Establishment of Certain Mutual Defense Commitments, done on December 1, 1995 (Chapeau Agreement), applies to this Memorandum of Understanding (MOU); and desiring to gain the benefits of the loan of specified property of the Providing Participant, pursuant to the following provisions, have reached the following understandings:

SECTION I

DESCRIPTION AND QUANTITY

1.1. The following items (hereinafter referred to collectively as the "Property") will be loaned by the Providing Participant to the Receiving Participant:

<u>Quantity</u>	<u>Description</u>	<u>Part/Stock #</u>	<u>Replacement Value</u>
1	CASI-2 Imaging Spectrometer	NA	US\$: 500,000

1.2. None of the Property identified above is intended to be consumed or expended in the course of the testing conducted under this MOU.

1.3. The loan period is from 15 days after signature of the MOU for one year, unless the latter date is extended pursuant to paragraph 12.2. of Section XII (Entry into Effect, Amendment, and Termination). In the event this MOU is terminated prior to expiration of the loan period, subparagraph 3.4.5. of Section III (Management and Responsibilities) applies.

SECTION II

OBJECTIVES

2.1. The overall objective of the MOU is to loan the Property for research, development, test, and evaluation purposes for the U.S. Air Force Research Laboratory Hyperspectral Exploitation Program. The specific objectives of this MOU include:

- 2.1.1. Establishment of detailed arrangements between the Providing Participant and Receiving Participant for the loan of the property.
- 2.1.2. Testing, evaluation, and analysis of the performance of the loaned Property by the Receiving Participant, which will allow for the development of calibration techniques for use on future imaging spectrometer systems.

- 2.1.3. Provision of a calibration test report to the Providing Participant that describes the results of the calibration test procedures and data collected and analyzed from the Property.
- 2.2. The mutual benefits provided under this MOU are:
 - 2.2.1. Understanding of the imaging and spectroscopic properties of the Property, which will provide the Participants with an opportunity to evaluate the performance of a commercially available imaging spectrometer.
 - 2.2.2. Developing and implementing calibration procedures broadly applicable to imaging spectrometers used by both the Participants.
 - 2.2.3. Promoting and increasing research and development and interoperability of imaging spectrometer technology.

SECTION III

MANAGEMENT AND RESPONSIBILITIES

3.1. Each Participant will establish a point of contact who will be responsible for coordinating and monitoring the overall test and evaluation effort to ensure achievement of MOU objectives. The Participants may advise each other, in writing, at any time of a change to the designated point of contact.

3.1.1. For the Providing Participant the point of contact is:

Dr. Vittala Shettigara
Intelligence, Surveillance and Reconnaissance Division,
Defence Science and Technology Organisation (DSTO)
P.O. Box 1500
Edinburgh, South Australia 5111
Phone: +61 (8) 8259 7176
Fax: +61 (8) 8259 5200
Email: Vitalla.Shettigara@dsto.defence.gov.au

3.1.2. For the Receiving Participant the point of contact is:

Dr. Ronald B. Lockwood
AFRL/RV
29 Randolph Road
Hanscom AFB, MA 01731-3010
Phone: 781-377-3688, DSN 478-3688
Fax: 781-377-3138, DSN 478-3138
Email: Ronald.lockwood@hanscom.af.mil

3.2. Each Participant will also designate Test Project Officer(s) who are responsible for implementing the responsibilities of the Participants as described herein. The Participants may advise each other, in writing, at any time of a change to the designated point of contact.

3.2.1. For the Providing Participant the Test Project Officer is:

Mr. Gavin Fowler
Intelligence, Surveillance and Reconnaissance Division,
Defence Science and Technology Organisation (DSTO)
P.O. Box 1500
Edinburgh, South Australia 5111
Phone: +61 (8) 8259 5917
Fax: +61 (8) 8259 5200
Email: Gavin.Fowler@dsto.defence.gov.au

3.2.2. For the Receiving Participant the Test Project Officer is:

Dr. Ronald B. Lockwood
AFRL/RV
29 Randolph Road
Hanscom AFB, MA 01731-3010
Phone: 781-377-3688, DSN 478-3688
Fax: 781-377-3138, DSN 478-3138
Email: Ronald.lockwood@hanscom.af.mil

3.3. **RESPONSIBILITIES OF THE PROVIDING PARTICIPANT:**

3.3.1. **LOAN OF THE PROPERTY** – The Providing Participant will loan the Property until testing and evaluation of the data is complete, or for the duration of the loan period (including any extension thereof approved in writing by the Providing Participant), or until termination of this MOU, whichever occurs first. The Providing Participant's point of contact will advise the Receiving Participant's point of contact of any shipping details for the Property, and confirm the receipt of returned Property (or a certificate of its destruction).

3.3.2. **PROPERTY DELIVERY** – The Providing Participant will deliver the property to the Receiving Participant at: Dr. Ronald B. Lockwood, AFRL/RV, 29 Randolph Road, Hanscom AFB, MA 01731-3010, Phone (781) 377-3688. Responsibility for, and possession of, the Property will pass from the Providing Participant to the Receiving Participant at the time of receipt of the Property. Any further transportation of the Property is the responsibility of the Receiving Participant, which will bear such costs in accordance with paragraph 4.3. of Section IV (Financial Arrangements).

- 3.3.3. **CONDITION** – The Providing Participant will use its best efforts to ensure the Property is furnished to the Receiving Participant in a serviceable condition suitable for its intended purpose. However, the Providing Participant makes no warranty nor guarantee of fitness of the Property for a particular purpose or use, and the Providing Participant makes no arrangement to alter, improve, adapt, or repair the Property or any part thereof.
- 3.3.4. **DOCUMENTATION** – The Providing Participant will furnish the Receiving Participant such operation and maintenance information as is necessary to conduct the test.

3.4. **RESPONSIBILITIES OF THE RECEIVING PARTICIPANT:**

- 3.4.1. The Receiving Participant's point of contact will make an inspection and inventory of the Property at the time of receipt of the Property and again when the Property is returned. The Receiving Participant's Test Project Officer(s) will acknowledge receipt of the Property, advise when the Property is returned upon completion of the tests (or issue a certificate of destruction) in accordance with subparagraph 3.4.5. of this Section, and provide a calibration test report as described in subparagraph 3.4.6. of this Section.
- 3.4.2. **INSTALLATION** – The Receiving Participant will be responsible for supplies and services required properly to install, align, and check out, and otherwise make the Property ready for testing.
- 3.4.3. **TRAINING** – The Receiving Participant will be responsible for obtaining operation and maintenance training for those personnel of the Receiving Participant assigned to operate and maintain the Property during the loan period.
- 3.4.4. **OPERATION AND MAINTENANCE OF THE PROPERTY** – The Receiving Participant will be responsible for all operation and maintenance required on the Property while in its possession.
- 3.4.5. **REMOVAL AND RETURN OF EQUIPMENT; RESPONSIBILITY FOR DAMAGED OR RETURNED PROPERTY** – Upon completion of testing and evaluation or expiration of the loan period (taking into account any approved extension of the loan period by the Providing Participant), or termination of this MOU pursuant to paragraph 12.3. of Section XII (Entry into Effect, Amendment, and Termination), whichever occurs first, the Receiving Participant will return the Property in good order, repair, and operable condition. The Receiving Participant will return the Property to DSTO, Adelaide, South Australia, and pay the cost to restore it to said condition if necessary. If the Property is damaged

beyond economical repair, the Receiving Participant will return the Property to the Providing Participant (unless otherwise specified in writing by the Providing Participant) to the location specified in this paragraph, or to another mutually agreed site, and pay its replacement value as specified in paragraph 1.1. of Section I (Description and Quantity), which has been computed pursuant to the Providing Participant's national laws and regulations. If the Property is lost while in the custody of the Receiving Participant, the Receiving Participant will issue a certificate of loss to the Providing Participant and pay the replacement value as specified in paragraph 1.1. of Section I (Description and Quantity).

- 3.4.6. **TEST REPORT** – Subject to the limitations of national disclosure policy, the Receiving Participant will furnish the Providing Participant a test report in accordance with this MOU. The test report will be provided without charge and will be furnished to the Providing Participant no later than 180 days after completion of the testing. The format and content of the report will reflect the Objectives (Section II) of this MOU.

3.5. This MOU provides only for the loan of Property for research, development, test, and evaluation purposes. Participation in this MOU does not imply any intention by either Participant to participate in any follow-on efforts beyond the scope of the MOU including the exchange of any additional information. Any other efforts will be established through separate arrangements.

SECTION IV

FINANCIAL ARRANGEMENTS

- 4.1. There are no charges for the loan of the Property or for the test report.
- 4.2. Each Participant will fully bear all costs it incurs for performing, managing, and administering its activities under this MOU.
- 4.3. The Receiving Participant is responsible for all costs of transportation including preparation, packing, and applicable customs charges within its country to ship the Property back to the point of origin upon test completion.

SECTION V

PROPERTY RIGHTS AND RESTRICTIONS

- 5.1. The Providing Participant retains title to all Property loaned under this MOU.
- 5.2. The Receiving Participant will make no changes or alterations to the Property except with the prior written approval of the Providing Participant.

5.3. The Property will be loaned only for the purpose set forth in Section II (Objectives) of this MOU. No other use of the Property by the Receiving Participant is authorized.

5.4. Information furnished by the Providing Participant to the Receiving Participant will be used by the Receiving Participant for operation and maintenance of the Property only, except as otherwise stated in this MOU.

5.5. Information generated under this MOU may be used by either Participant for Defense Purposes. In this MOU, the term "Defense Purposes" means the manufacture or other use in any part of the world by or for the armed forces of either Participant.

5.6. No intellectual property rights, other than as spelled out in this MOU, are created or conveyed by this MOU. The Participants will ensure, by all means available to them, the protection of property rights to the Property, test data, and other information provided or generated under this MOU, whether subject to patent (or like protection) or not.

5.7. Any specification, production information, or manufacturing know-how incidentally derived from the performance of the provisions of this MOU will be used and fully protected in accordance with this MOU.

5.8. The Participants mutually determine that this MOU provides the authority for the exchange of information as set forth in subparagraphs 3.3.4. and 3.4.6. of Section III (Management and Responsibilities) only.

5.9. All export-controlled information and/or Property furnished by the U.S. DoD, its contractors, and their subcontractors pursuant to this MOU will be subject to export controls established by the U.S. Government in accordance with the Arms Export Control Act and International Traffic in Arms Regulations.

SECTION VI

RELEASE OF INFORMATION UNDER LEGISLATIVE PROVISIONS

6.1. Each Participant will take all appropriate lawful steps available to it to keep both classified information provided or generated under this MOU and unclassified information that is provided or generated with the condition that it is to be treated in confidence, free from unauthorized disclosure. In the event of unauthorized disclosure or if it becomes probable that such information may have to be disclosed under any legislative provision to other persons or to a judicial body, immediate notification will be given to the other Participant.

6.2. Such information will be safeguarded in a manner that ensures its proper protection from unauthorized disclosure.

6.3. To assist in providing protection, the information will be marked with a legend containing the country of origin, a reference to the MOU, the security classification, if any, and if the information is unclassified but is to be treated in confidence, the provisions of release and a statement to the effect that the information is furnished in confidence.

SECTION VII

VISITS TO ESTABLISHMENTS

7.1. Each Participant will permit visits to its governmental establishments, agencies, and laboratories, and contractor industrial facilities by employees of the other Participant or the other Participant's contractor(s), provided that the visit is authorized by both Participants and the employees have appropriate security clearances and a need-to-know. Approved visits will be accommodated on a not-to-interfere basis.

7.2. All visiting personnel will be required to comply with the security regulations of the host Participant. Any information disclosed or made available to visitors will be treated as if supplied to the Participant sponsoring the visiting personnel, and will be subject to the provisions of this MOU.

7.3. Requests for visits by personnel of one Participant to a facility of the other Participant will be coordinated through official channels, will cite this MOU as the basis for such requests, and will conform with the established visit procedures of the host Participant.

7.4. Lists of personnel of each Participant required to visit on a continuing basis facilities of the other Participant, will be submitted through official channels in accordance with recurring international visit procedures.

SECTION VIII

SECURITY

8.1. Any classified information or Property transferred pursuant to the provisions of this MOU will be stored, handled, transmitted, and protected in accordance with the Agreement between the Government of the United States of America and the Government of Australia Concerning Security Measures for the Protection of Classified Information, dated November 7, 2002.

8.2. The following security classifications apply:

8.2.1. The Property is **UNCLASSIFIED**.

8.2.2. The Project is **FOR OFFICIAL USE ONLY**.

8.2.3. The Test Report will be **FOR OFFICIAL USE ONLY**.

SECTION IX

THIRD PARTY TRANSFERS

9.1. The Receiving Participant will not disclose or transfer any Property, test data, or other information provided to it under this MOU to any Third Party without the prior written consent of the Providing Participant's Government. The Participants will not disclose any information generated under this MOU to any Third Party without the prior written consent of the other Participant's Government. For the purposes of this MOU, the term "Third Party" means a government other than the Government of a Participant and any person or other entity whose government is not the Government of a Participant.

9.2. Disclosures or transfers requiring authorization under paragraph 9.1. of this Section will not be made or authorized unless the Third Party recipient consents in writing that it will not use any such equipment or information for purposes other than those for which it was furnished nor permit any further transfer without the prior written consent of both Participants.

SECTION X

LIABILITY

10.1. Except as provided in subparagraph 3.4.5. of Section III (Management and Responsibilities) and subject to paragraph 4. of the Chapeau Agreement, claims arising under this MOU will be dealt with in accordance with paragraph 1. of the Chapeau Agreement. The Participants will share any costs required to be shared under subparagraph 1. b) ii. of the Chapeau Agreement on the following basis:

10.1.1. When responsibility for the damage, loss, injury, or death can be specifically attributed to one Participant, the cost of handling and settling the claim will be the sole responsibility of that Participant: and

10.1.2. When both Participants are responsible for the damage, loss, injury or death or it is not possible to attribute responsibility for the damage, loss, injury or death specifically to either Participant, the cost of handling and settling a claim will be distributed equally between them.

10.2. Unless otherwise mutually determined by the Participants, the cost of claims arising as a consequence of a contract will be the sole responsibility of the Participant that is a party to the contract. The Participants will not indemnify contractors against Third Party liability claims.

SECTION XI

SETTLEMENT OF DISPUTES

11.1. Disputes between the Participants arising under or relating to this MOU will be resolved only by consultation between the Participants and will not be referred to a national court, to an international tribunal, or to any other person or entity for settlement.

SECTION XII

ENTRY INTO EFFECT, AMENDMENT, AND TERMINATION

12.1. All activities of the Participants under this MOU will be carried out in accordance with their national laws and regulations, including their export control laws and regulations. The responsibilities of the Participants will be subject to the availability of funds for such purposes.

12.2. This MOU may be amended or extended by written mutual consent of the Participants. The loan period specified in paragraph 1.3. of Section I (Description and Quantity) may be amended by the written consent of the Providing Participant, provided that any such extension is within the effective period of this MOU.

12.3. This MOU may be terminated at any time:

12.3.1. By mutual consent of the Participants;

12.3.2. By the Receiving Participant on 30 days written notice; or

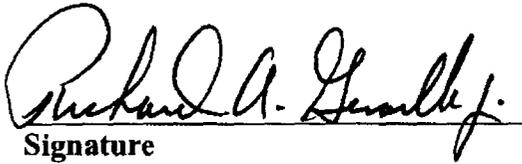
12.3.3. By the Providing Participant at any time.

12.4. Arrangements and responsibilities regarding security and protection of property benefits against unauthorized use, disclosure, or transfer that accrued prior to termination or expiration of this MOU will continue to apply without limit of time.

12.5. This MOU will come into effect on the date of the later signature below, and unless terminated or extended, will remain in effect for one year.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Participants, have signed this MOU in duplicate on the dates indicated below.

**For The Department of Defense of the
United States of America**


Signature

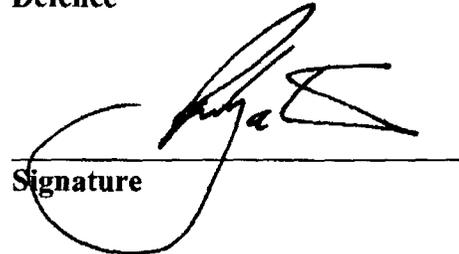
RICHARD A. GENAILLE, Jr.
Name

**Director of Policy
International Affairs**
Title

NOV 21 2007
Date

Arlington, Virginia, U.S.A.
Location

**For the Australian Department of
Defence**


Signature

RAYDON BATES, REAR ADMIRAL, RAN
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**HEAD AUSTRALIAN DEFENCE
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