Honeywell

October 25, 1974

Massachusetts Institute of Technology Office of Sponsored Programs 77 Massachusetts Avenue Cambridge, MA 02139 SPONCERS DESCARDE

Attention: Tom Lightburn

Room E19-702

Subject: Project Guardian Subcontract

Reference: F19628-74-C-0193

Gentlemen:

Please find enclosed the proposed subcontract for the Project Guardian Subcontract work to be performed by Jerome Saltzer. Please review this subcontract and, if acceptable, please contact the undersigned at 703-790-3604. A signed original will then be transmitted to you for your signature.

It is requested that you expedite issuance of invoices pursuant to this subcontract as previously discussed between Mr. Tom Lightburn and the undersigned.

Sincerely,

S. M. Wilson

Contract Administrator

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Enclosure

Research and Development Subcontract

Subcontract effective this day of , 197 , by and between the Massachusetts Institute of Technology (hereinafter referred to as "Subcontractor") a corporation organized under the laws of the Commonwealth of Massachusetts, having its principal place of business in Cambridge, Massachusetts; and Honeywell Information Systems Inc. (hereinafter referred to as "Contractor") a Delaware corporation having a place of business within the Commonwealth of Virginia at 7900 Westpark Drive, McLean, Virginia.

Whereas, the Contractor and Subcontractor entered into a research agreement dated December 31, 1973; and

Whereas, the Contractor and Subcontractor desire to execute an additional agreement hereinabove referred to as Research and Development Subcontract which new agreement is intended to and hereby does supersede the agreement dated December 31, 1973, in its entirety.

Now, Therefore, in consideration of the premises and mutual covenants herein contained, the parties hereto agree as follows:

- 1. All payments made and services performed pursuant to the research agreement between the Contractor and the Subcontractor dated December 31, 1973, which is hereby superseded in its entirety, shall be deemed made and performed pursuant to this subcontract.
- 2. The total amount of this subcontract shall be not in excess of \$497,970.
- 3. Delivery of all items to be supplied under this subcontract shall be F.O.B. destination.
- 4. This subcontract is certified for national defense purposes pursuant to BDSA Regulation 2 and/or DMS Regulation 1 and has a priority rating DO-A7.
- 5. This subcontract and the work to be performed hereunder may not be assigned, further subcontracted, or otherwise transferred in whole or in part without the prior written consent of the Contractor.
- 6. Sections A, B, C, and D and Attachments A and B attached hereto are hereby made a part hereof as if fully set forth herein.

In Witness Whereof, Honeywell Information Systems Inc. has caused this subcontract to be signed in its name and on its behalf by its

representative thereunto duly authorized, and the Massachusetts Institute of Technology has caused this subcontract to be signed in its name and on its behalf by its representative thereunder duly authorized, as of the day and year first above written.

HONEYWELL	INFORMATION SYSTEMS INC.	MASSACHUSETTS INSTIT	UTE OF TECHNOLOGY
Ву		Ву	
Title		Title_	
Date		Date	

Section A:

List of References/Attachments

Order of Precedence

References

- Basic Agreement between the United States of America and Massachusetts Institute of Technology - F18600-74-A-0161.
- 2. USAF Contract F19628-74-C-0193, dated 27 June 1974.
- 3. Multics Software Agreement between Massachusetts Institute of Technology and Honeywell Information Systems Inc., dated 13 February 1973 and Amendment I thereto.
- 4. Research Agreement between Massachusetts Institute of Technology and Honeywell Information Systems Inc., dated 31 December 1973.

Attachments

- 5. Attachment A, Statement of Work Security Kernel Evaluation for Multics.
- 6. Attachment B, Subcontract Data Requirements List, Data Item Description Sheets, and Backup Sheets for Data Items.

Order of Precedence

- 7. The following documents are listed in the order of precedence and in the event of any inconsistency in this contract, the inconsistency shall be resolved by giving precedence in the following order:
 - A. Section A, Order of Precedence Clause.
 - Research and Development Subcontract dated the _____ day of ____, 197__.
 - C. Section B, Subcontract Schedule.

- D. Attachment A, Statement of Work.
- E. Attachment B, Subcontract Data Requirements List, Data Item Description Sheets, and Backup Sheets for Data Items.
- F. Section C, Special Provisions.
- G. Section D, General Provisions.

Section B:

Subcontract Schedule

1. Type of Subcontract and Amount

This is a Cost Reimbursement (No Fee) Research and Development type subcontract. The total estimated cost for performance of the work called for herein is \$497,970. Massachusetts Institute of Technology acknowledges receipt to date of \$200,000 of such sum.

2. Description of Services to be Provided

The Subcontractor shall develop the functional interface to a security kernel for the Multics computer operating system and evaluate the future work required to design and implement security software on the Multics system in accordance with Attachment A entitled "Statement of Work for Security Kernel Evaluation for Multics" and under and in accordance with the written direction of the Honeywell Project Manager. The Subcontractor shall also furnish data and reports to support this project as called for in the Subcontract Data Requirements List (SDRL). This subcontract supersedes the Research Agreement between Honeywell and Massachusetts Institute of Technology dated December 31, 1973, in its entirety.

3. Term of Subcontract

This subcontract covers the period from its effective date through 30 June 1975 with the exception that data items and reports will be submitted as required by the SDRL.

4. Inspection and Acceptance

All data items and reports will be inspected and accepted at the issuing office shown.

Section C:

Special Provisions

1. Acknowledgment of Sponsorship

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- a. The Subcontractor agrees that in the release of information relating to this subcontract, such release shall be subject to prior? approval by Honeywell and shall include a statement to the effect that the project or effort depicted was or is sponsored by Air Force Information Systems Technology Applications Office, Air Force Systems Command and Defense Advanced Research Projects Agency, DOD under Prime Contract No. F19628-74-C-0193, and the subcontract is under the technical cognizance of the Air Force Information Systems Technology Application Office.
- b. For the purpose of this clause, "information" includes, but is not limited to, news releases, articles, manuscripts, brochures, advertisements, still and motion pictures, speeches, trade association meetings, symposia, etc.
- c. Nothing in the foregoing shall affect compliance with the requirements of the clause of this subcontract entitled "Military Security Requirements."
- d. The Subcontractor further agrees to include this provision in any further subcontract awarded as a result of this subcontract.
- 2. The Subcontractor shall report, in writing, to the Contract Administrator (S. M. Wilson, Honeywell Information Systems Inc., 7900 Westpark Drive, McLean, Virginia 22101) all deliveries made under this subcontract at the time of delivery. This includes products, services, reports and any other data as appropriate.
- 3. General Systems Engineering and Technical Direction (GSE/TD) Clause
- a. The ADP Systems Security Development Program covered by Prime Contract No. F19628-74-C-0193 is under general program management of Air Force Information Systems Technology Applications Office, Air Force Systems Command. The Electronic Systems Division has been assigned the responsibility of providing necessary management control over this subcontract. The Air Force has entered into a contract with the MITRE Corporation for the services of a technical group which will, under the program management of the Electronic Systems Division, be responsible for general systems engineering and corresponding technical direction of the efforts under this subcontract. Does this year that Marke was control of the efforts under this subcontract. Does this year
- b. (1) General systems engineering is defined as that portion of systems engineering dealing with the overall integration of a system, design compromises among subsystems, definition of inter- and intrasystem interfaces, analysis of subsystem and supervision of system

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testing, all to the extent required to assure that system concept and objectives are being met in an economical and timely manner.

- (2) Technical direction is defined as a process by which the progress of the Contractor's or Subcontractor's technical efforts is reviewed, information on the various technical areas involved is exchanged, and plans for future contract efforts are formulated, and, where it will better achieve Air Force objectives, the Contractor's or Subcontractor's technical effort is modified, realigned or redirected.
- agrees, subject to the prior written approval of Contractor, to cooperate with the MITRE Corporation by responding to invitations to meetings, requests for technical information and requests for research and development planning data on all matters pertaining to this subcontract and by discussing with the MITRE Corporation employees, technical matters relating to this program. The Subcontractor further agrees to accept technical direction as described herein, provided that the prior written approval of the Contractor is received. Dangerous?
- c. Formalization of general systems engineering and technical direction generated by the MITRE Corporation of effort under this subcontract will be documented by issuance of a serially numbered "Technical Directive," executed by representatives of the MITRE Corporation and the Electronic Systems Division. The Subcontractor shall comply with the terms of a "Technical Directive" only if it is in writing and signed by the Contractor's Project Manager and Contract Administrator stating that compliance with such "Technical Directive" is directed pursuant to the clause of this subcontract entitled "Changes."
- d. Should Subcontractor receive general systems engineering supervision, technical direction or requests for cooperation or data directly from either Air Force or MITRE Corporation personnel, then the Subcontractor agrees not to accept such supervision or direction or to cooperate with or furnish data to such personnel without the prior written approval of the Contractor. We can't take Schell(?)

4. Pre-Contract Costs

All costs which have been incurred on and after 01 January 1974 by the Subcontractor in anticipation of this Subcontract and prior to 01 July 1974, and which if incurred on and after 01 July 1974, would have been considered allowable costs hereunder, shall be allowable costs hereunder provided such costs do not exceed \$77,537.25.

5. Incorporation of Basic Agreement Provisions F18600-74-A-0161

This subcontract includes the below listed clauses which are a part of Section B: Special Provisions of Basic Agreement F18600-74-A-0161. Where applicable in the text of the clauses Subcontractor should be substituted for Contractor and Contractor should be substituted for Government.

- B-5. Walsh-Healey Public Contracts Act
- B-6. Filing of Patent Applications
- B-9. Patent Rights
- B-17. Price Reduction for Defective Cost or Pricing Data
- B-21. Abstract of New Technology
- B-23. Military Security Requirements
- B-24. Subcontractor Cost or Pricing Data
- B-27. Contract Schedule Items Requiring Experimental, Developmental or Research Work
- B-32. Cost Accounting Standards
- 6. Principal Investigator for M.I.T.

This research program will be under the supervision of Professor Jerome H. Saltzer, Principal Investigator for this research.

7. Patents

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- a. Title to any invention (Invention hereinafter) made in the performance of this research shall jointly vest in Subcontractor and the Contractor, whether Invention was made solely by Subcontractor personnel, or solely by Contractor personnel, or jointly by both Subcontractor and Contractor personnel.
- b. With respect to Inventions made in the performance of the research, the parties shall promptly and fully disclose in writing to each other each such Invention. The Subcontractor shall have the first election to file a patent application on an Invention and to be responsible for the prosecution thereof, provided, however, that the Subcontractor's election to prosecute must be conveyed to the Contractor in writing within six months after an Invention disclosure is made by either of the parties. If the Subcontractor elects not to prosecute a patent application either in the United States or foreign countries or to discontinue the prosecution of maintenance thereof, the Subcontractor shall timely inform the Contractor and the Contractor may elect to so prosecute or maintain.

- c. The cost of securing a patent, and any maintenance fees, hereinafter called prosecution costs, for each Invention shall be determined and agreed to by consultation between the parties prior to the commitment or expenditure of funds, and such prosecution costs shall be apportioned equally between the parties. If the parties fail to agree on the prosecution costs for a particular Invention either in the United States or in foreign countries, then the party electing to proceed with the prosecution per paragraph (b) above shall bear all the costs thereof.
- d.(1) All income and/or royalties earned by licensing, leasing, and/or selling during the first seven (7) years after the CHANGEOVER DATE as defined in the Multics Software Agreement dated February 13, 1973, of Rights to an Invention on which a patent has issued or a patent application is pending shall be apportioned between the Subcontractor and the Contractor according to the schedule of paragraph 2 (ii) of said Amendment I to the Multics Software Agreement dated February 13, 1973.
- d. (2) During the eighth and following years expiring with the expiration of any patents issuing on Inventions, all income and/or royalties earned by licensing, leasing, and/or selling during such eighth and following years of Rights to an Invention on which a patent has issued or a patent application is pending shall be apportioned equally between the Subcontractor and the Contractor, provided that such parties have equally shared the prosecution costs as provided in paragraph (c) in this Section 7.
- d. (3) During the eighth and following years expiring with the expiration of any patents issuing on Inventions, all income and/or royalties earned by licensing, leasing and/or selling during such eighth and following years of Rights to an Invention on which a patent has issued or a patent application is pending shall be apportioned between the Subcontractor and Contractor in proportion to the extent such parties have shared the prosecution costs as provided in paragraph (c) in this Section 7.
- d. (4) The income and/or royalties earned by the Contractor as provided in this paragraph (d) of this Section 7 shall not be apportioned between the parties if such licensing, leasing and/or selling of Right to such Inventions on which a patent has issued or a patent application is pending is incidental to the sale, lease or otherwise supplying or licensing to manufacture of computer hardware by the Contractor.

8. Publications

The Subcontractor and the Contractor shall be free to publish papers dealing with results of research under this Agreement, after giving a copy of the paper to the other party. Both parties shall use their best efforts to provide such papers to the other party promptly so that patent applications based thereon may be considered. Refer to paragraph 1 hereinabove entitled "Acknowledgment of Sponsorship."

9. Copyrights

All copyrightable material, including software, developed in the performance of this research shall jointly vest in the Subcontractor and the Contractor and shall be marked with statutory copyright notices jointly in the names of the Subcontractor and the Contractor, and such notices applied to each separately copyrightable element shall have the form specified in Appendix B to the Multics Software Agreement of February 13, 1973.

10. Software

All software developed in the performance of this research subcontract shall be considered to be jointly developed by the Subcontractor and the Contractor and the rights thereto shall be disposed of according to the terms of Amendment I to the February 13,
1973, Multics Software Agreement, said Amendment I executed simultaneously with the execution of the prior research agreement, and
the terms and conditions of which are incorporated herein by reference.

11. Use of the Name of the Subcontractor

The Contractor agrees not to use the name of the Subcontractor or any member of its staff in sales promotion work or advertising, or in any form of publicity without the written permission of the Director of the Division of Sponsored Research, Massachusetts Institute of Technology, which permission shall not be unreasonably withheld.

12. Office Space

The Massachusetts Institute of Technology shall provide adequate office space for a Honeywell representative. This includes a desk and chair, heat, light, ventilation, electrical current and electrical outlet. They shall also allow Honeywell to connect a telephone for their use. Charges for this telephone service will be paid by Honeywell. This office space should be within a reasonable distance of the principal Massachusetts Institute of Technology personnel performing this subcontract.

For what purpose is this person, and about one any control over his celection?

Section D:

General Provisions

1. Incorporation of Basic Agreement Provisions F-18600-74-A-0161

This subcontract includes all of the clauses included in Section A: General Provisions of Basic Agreement F18600-74-A-0161. Where applicable in the text of the clauses, Subcontractor shall be substituted for Contractor and Contractor shall be substituted for Government.