

11C 65-51

WBR

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January 14, 1965

~~WHEN SEPARATED FROM INCLOSURES, HANDLE
THIS DOCUMENT AS *unclassified*~~

TO: W. B. Reynolds

SUBJECT: Revised First Modification to
Project Agreement No. 5 to Subcontract 212,
Monsanto Research Corporation

The attached letter, which has been prepared for your transmittal to the AEC, contains an explanation for a proposed change in the estimated cost and fixed fee of the First Modification to Project Agreement No. 5.

This revision which changes only the estimated cost of \$96,274 including a fixed fee of \$6,729 to \$93,469 including a fixed fee of \$6,519 has the verbal approval of the AEC.

C. L. Blue
C. L. Blue

CLB:JPH:sm

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~~This material contains information affecting the
National Defense of the United States within the
meaning of the Espionage Laws, Title 18,
Sections 793 and 794, the transmission or revelation
of which in any manner to an unauthorized person
is prohibited by law.~~
~~GROUP IV~~
~~Declassified after 17 years~~

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F302

PC 65-157

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re: [unclear]
D.L. ABOM
7/27/64

FIRST MODIFICATION TO PROJECT AGREEMENT NO. 5

of

APPENDIX B TO SUBCONTRACT 212

between

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

and

MONSANTO RESEARCH CORPORATION

INTRODUCTION

This First Modification to Project Agreement No. 5 of Appendix B to Subcontract 212 is entered into by and between the Regents of the University of California, hereinafter called "University" and Monsanto Research Corporation, hereinafter called "Subcontractor".

PURPOSE

The purpose of this First Modification is to increase the level of effort to be performed under Project Agreement No. 5, to extend the term of the Project Agreement through April 15, 1965, to increase the estimated cost and fixed fee, and to expand the Scope of Work.

CHANGE

Project Agreement No. 5 of Appendix B to Subcontract 212 is hereby changed by mutual agreement of the parties as follows:

SECTION I - GENERAL SCOPE OF WORK, is hereby changed to read:

"As approved and directed by the University's Technical Coordinator, the Subcontractor shall, on a best efforts basis, devote approximately three man years of technical effort to the development of binders for bonded high explosives. In this effort, the Subcontractor will attempt to develop binders which will result in bonded explosives having mechanical properties and explosive strength superior to present bonded explosives. Subcontractor will prepare binders by dissolving lithium perchlorate in a mixture of plasticizers and polymer precursors which can subsequently be polymerized. These binders will be combined with explosives to form bonded explosives which can be pressed or cast to appropriate configurations. Explosives with various binders will be tested to evaluate the physical and explosive properties of the various binder-explosive combinations."

CLASSIFICATION CANCELLED OR
CHANGED TO *Unclassified*
BY AUTH. *PC 65-157-1137*
DATE *10-15-95*
Wm. M. H. R. 10/16/95

June 8, 1964

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~~GROUP 1 - Declassified as of 10-15-95~~
~~Declassify after 12 years~~

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SECTION II - TECHNICAL SCOPE OF WORK, Paragraph B, Materials Preparation is hereby changed to read:

"Subcontractor will prepare and investigate the following binder systems:

- "1. Solid solution binders based upon acrylonitrile methacrylonitrile copolymer binders.
- "2. Solid solution binders employing copolymers with high energy groups.
- "3. Binders based upon new high energy monomers. Subcontractor will investigate the synthesis and polymerization of the new high energy monomers and will, in addition, synthesize new high energy plasticizers for application to the new binder systems.

"Subcontractor will, as necessary, modify the binder composition by varying the following:

- "1. The percent and the identity of the plasticizer.
- "2. The percent and identity of a crosslinking monomer such as methylene-bis-acrylamide.
- "3. The amount and type of polymerization initiator and inhibitor.
- "4. The identity of the polymer precursor.
- "5. The quantity of dissolved oxidizer."

SECTION II - TECHNICAL SCOPE OF WORK, Paragraph C - Explosives, is changed to read:

"Subcontractor will use the following high energy materials which will be furnished by the University:

- "1. HMX
- "2. High energy monomer systems such as 2,2-dinitro-fluoroethyl acrylate for use in polymerization studies."

SECTION III - MATERIALS AND EQUIPMENT, is changed to read:

"The University will furnish Subcontractor adequate quantities of HMX and high energy monomer systems for use under this Project Agreement.

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"Government-owned Master-Slave Manipulator, Bureau of Mines impact test apparatus and Atlantic Research Corporation strand burning rate apparatus will be used by the Subcontractor for work under this Project Agreement."

SECTION V - SCHEDULE AND DELIVERY is changed to read:

"Research and development work under this Agreement shall commence March 1, 1963 and continue for a period of approximately 24 months. Work described in Section II - TECHNICAL SCOPE OF WORK, shall be completed prior to February 28, 1965. All work shall be completed and all reports submitted prior to April 15, 1965."

SECTION VI - TERM, ESTIMATES, FIXED FEE, COSTS AND EXPENSES, is changed to read:

"In accordance with ARTICLE II - TERM, and ARTICLE III - ESTIMATES AND FIXED FEE and Appendix A - COSTS AND EXPENSES of Subcontract 212, for services rendered by the Subcontractor between March 1, 1963 and April 15, 1965 Subcontractor shall be reimbursed in the amount not to exceed \$93,469 which shall include Subcontractor's fixed fee of \$6,519. Through April 15, 1964 reimbursement for work performed at Subcontractor's Boston facility under this Project Agreement No. 5, General Overhead Costs shall be limited to an amount not to exceed 95% of Direct Labor including payroll burden charged to this Project Agreement and actual reimbursable General and Administrative expense shall be limited to an amount not to exceed 5% of total allowable cost under this Project Agreement.

"Effective April 16, 1964, ceiling overhead rates shall not apply to reimbursement for work performed at Subcontractor's Boston facility under this Project Agreement No. 5. Subsequent to April 16, 1964, pending final audit and determination of overhead, the Subcontractor shall be reimbursed on a provisional basis at the following rates:

Payroll Burden	18%	- Applied to Direct Labor Cost
Overhead	91%	- Applied to Direct Labor Cost plus Payroll Burden
G&A	9%	- Applied to Total Cost before G&A

"Such provisional payments will be adjusted to the actual overhead cost and expenses determined as set forth in Appendix A to Subcontract 212 and principles therein established. When actual reimbursable overhead costs have been determined pursuant to this Subcontract, adjustment shall be made for the difference between the sum to be determined by the sum of the provisional payments made.

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SECTION VIII - COORDINATION AND ADMINISTRATION, Paragraph B is changed to read:

"B. The Technical Coordinator for the University and within this Scope of Work is Mr. Milton Finger, his designee or successor."

SECTION IV - REPORTS, is changed to read:

"A. Progress Reports

The Subcontractor shall prepare and submit by the 15th of each month, progress reports describing work performed during the previous month.

"B. Financial Reports

Subcontractor will submit monthly expenditure analysis reports which shall confirm and/or explain actual cost experience.

"C. Final Report

Subcontractor will submit a comprehensive report covering work results and conclusions upon completion of twelve months work under this Project Agreement. Subcontractor will submit a second comprehensive report covering work results and conclusions during the final twelve months work under this Project Agreement.

"D. Distribution of Reports

Formal reports shall be distributed as follows:

Mailing Address: University of California
Lawrence Radiation Laboratory
P. O. Box 808
Livermore, California 94551

Number of Copies:

3	Milton Finger, Trailer 30
1	Technical Information, Bldg. 112, Rm. 1067
1	Director's Office, Bldg. 112, Rm. 1041
1	Procurement Dept., Bldg. 161, Rm. 1113

"E. Interim Reports

It is understood that from time to time there will be other information exchanged between the parties. These data may be exchanged directly between the parties concerned. Formal report form and distribution is not required in these instances."

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ALL OTHER TERMS AND CONDITIONS of Project Agreement No. 5 of Appendix B to Subcontract 212 shall remain in full force and effect except as changed herein.

ACCEPTED:

AUTHORIZED:

MONSANTO RESEARCH CORPORATION

UNIVERSITY OF CALIFORNIA
LAWRENCE RADIATION LABORATORY

RMV By J.H. Nason

By R. Plonoff

Title President

Title Deputy Business Manager

Date 18 January 1965

Date JAN 21 1965

APPROVED:

U. S. ATOMIC ENERGY COMMISSION

By W.H. Brummell, Jr.

Title W. H. Brummell, Jr.

Date Director, Contracts Division
JAN 26 1965

June 8, 1964
1st Mod. to PA 5
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June 8, 1964

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~~GROUP 1 - Excluded from automatic downgrading and declassification~~

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ACCEPTED:

AUTHORIZED:

MONSANTO RESEARCH CORPORATION

UNIVERSITY OF CALIFORNIA
LAWRENCE RADIATION LABORATORY

RMD By J.H. Nason

By R. Connelley

Title President

Title Deputy Business Manager

Date 18 January 1965

Date JAN 21 1965

APPROVED:

U. S. ATOMIC ENERGY COMMISSION

By W.H. Brummell, Jr.

Title W. H. Brummell, Jr.

Date Director, Contracts Division
JAN 26 1965

June 8, 1964
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