

SUPPLEMENTAL AGREEMENT
BETWEEN
VIRGINIA POLYTECHNIC INSTITUTE AND STATE
UNIVERSITY
AND
THE U. S. NUCLEAR REGULATORY COMMISSION

THIS SUPPLEMENTAL AGREEMENT, effective the 16th day of May , 1981, by and between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), as represented by the UNITED STATES NUCLEAR REGULATORY COMMISSION (hereinafter referred to as the "Commission"), and VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY (hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

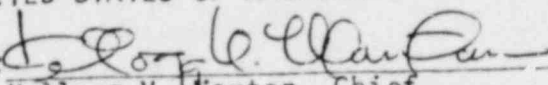
WHEREAS, the parties desire to modify Contract No. NRC-04-75-237 as hereinafter provided, and this supplemental agreement is authorized by law, including the Energy Reorganization Act of 1974, as amended, and the Atomic Energy Act of 1954, as amended.

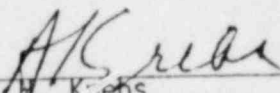
NOW, THEREFORE, said contract is hereby modified as follows:

1. Appendix A, attached to this supplemental agreement and made a part hereof, provides for the research to be performed by the Contractor during the contract period specified therein.
2. In Article II - The Period of Performance, the date "May 15, 1982" is substituted for the date "May 15, 1981".
3. In Article III - Consideration, the sum "\$674,078.97" is substituted for the sum "\$495,061.97".

IN WITNESS WHEREOF, the parties have executed this document.

UNITED STATES OF AMERICA

BY: 
Kellogg V. Morton, Chief
Research Contracts Branch
Division of Contracts
U. S. Nuclear Regulatory Commission

BY: 
A. H. Krebs
Vice President for Administration
(title)

VIRGINIA POLYTECHNIC INSTITUTE AND
STATE UNIVERSITY

I, Margie W. Thomas, certify that I am the
(attester)

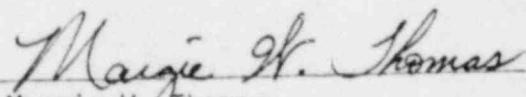
Clerk to the Board of Visitors of the Contractor named under this
(title)

document; that A. H. Krebs who signed this
(signatory)

document on behalf of said Contractor was then Vice President for Administration

of said Contractor; that this document was duly signed for and on behalf of
said Contractor by authority of its governing body and is within the scope
of its legal powers.

IN WITNESS WHEREOF, I have hereunto affixed my hand and the seal of said
Contractor.


Margie W. Thomas

(SEAL)

CONTRACTOR: VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

APPENDIX A

For the Contract period May 16, 1981 through May 15, 1982

Article A-I RESEARCH TO BE PERFORMED BY CONTRACTOR

- (a) The scope of work under this contract is unclassified and shall be in accordance with Contractor's proposal entitled, "Studies of the Pattern and Ages of Post-Metamorphic Faults and Other Crustal Elastic Anisotropies in the Northern Piedmont of Virginia and North Carolina" dated 5/16/81.
1. Develop a three-dimensional geologic framework of part of the Central Virginia Seismic Zone in terms of: a) faults, and b) surfaces of appreciable rigidity contrast which may localize faulting.
 2. Complete a regional study of the tectonic framework of Triassic-Jurassic basins in Virginia and of the relation of this framework to historical seismicity.
 3. Continue compilation and analysis of: a) structures, and b) crustal heterogeneity in elastic properties for Virginia and adjacent areas of North Carolina.
 4. Prepare a final report.
- (b) The Principal Investigator expects to devote the following approximate amount(s) of time to the contract work:
Dr. Lynn Glover, III, Eleven percent (11%) of his time during the academic year.
Dr. John K. Costain, Eleven percent (11%) of his time during the academic year.

ARTICLE A-II WAYS AND MEANS OF PERFORMANCE

(a) Items for which support will be provided as indicated in A-III, below

- | | |
|---|--------------|
| (1) Salaries and Wages | \$ 91,615.00 |
| (2) Equipment to be purchased or fabricated by the Contractor | \$ 2,500.00 |
| <u>OVER \$1,000.00</u> | |
| Servo valve 150 GPM w/Atlas Pilot Stage - \$2,500.00 | |
| (3) Travel | |
| (i) Domestic | \$ 4,832.00 |
| (ii) Foreign | \$ -0- |

- (4) Other direct costs including fringe benefits.
- (5) Indirect costs based on a predetermined rate of 43 percent applicable to modified total direct costs.

- (b) Items, if any, significant to the performance of this contract, but excluded from computation of Support Cost and from consideration in proportioning costs:
 - OSL Electro-Tec House \$5,000.00
 - TO BE CONTRIBUTED (Rent & Utilities)
 - BY THE CONTRACTOR Secretary 50% of time for 3 mos. \$1,273.00
 - Indirect Cost \$2,697.00 /Total
- (c) Time or effort of Principal Investigator(s) including indirect costs and fringe benefits contributed by Contractor but excluded from computation of Support Cost and from consideration in proportioning costs: TO BE CONTRIBUTED BY THE CONTRACTOR
 - Lynn Glover, III, Eleven percent (11%) of his time during the academic year.
 - John K. Costain, Eleven percent (11%) of his time during the academic year.

Article A-III

The total estimated cost of items under A-II(a) above for the contract period stated in this Appendix A is \$ 179,017.00 ; the Commission will pay 100 percent of the actual costs of these items incurred during the contract period stated in this Appendix A, subject to the provisions of Article III and Article B-XXVIII. The estimated NRC Support Cost for the contract period stated in this Appendix A is \$179,017.00 .

The estimated NRC Support Cost is funded as follows:

- (a) Estimated unexpanded balance from prior period(s) \$ -0-
- (b) New funds for the current period \$ 179,017.00
- (c) The new funds being added in A-III(b) constitute the basis for advance payments provided under Article B-X.