

SUPPLEMENTAL AGREEMENT
BETWEEN

SAINT LOUIS UNIVERSITY
AND
THE U. S. NUCLEAR REGULATORY COMMISSION

THIS SUPPLEMENTAL AGREEMENT, effective the 1st day of July , 1980, 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 SAINT LOUIS UNIVERSITY (hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

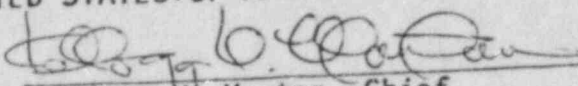
WHEREAS, the parties desire to modify Contract No. NRC-04-76-282 as hereinafter provided, and this supplemental agreement is authorized by law, including the Energy Reorganization Act of 1974, as amended, and the Atomic Energy Act of 1954, as amended.

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 " June 30, 1981 " is substituted for the date " June 30, 1980 ".
3. In Article III - Consideration, the sum "\$383,573.00 " is substituted for the sum "\$ 271,573.00".

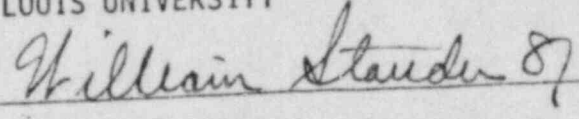
IN WITNESS WHEREOF, the parties have executed this document.

UNITED STATES OF AMERICA

BY: 
Kellogg M. Morton, Chief
Research Contracts Branch
(title)

Nuclear Regulatory Commission

SAINT LOUIS UNIVERSITY

BY: 
Research Administrator
(title)

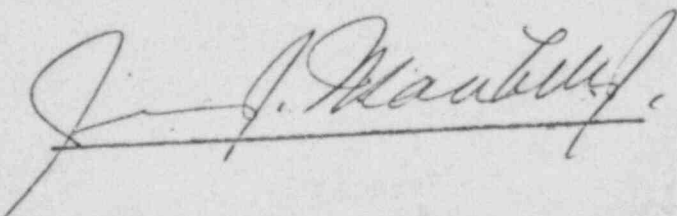
I, Jerome J. Marchetti, S.J., certify that I am the
(attester)
Secretary-Treasurer of the Contractor named
(title)

under this document; that William Stauder, S.J.
(signatory)

who signed this document on behalf of said Contractor was then
Research Administrator 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.



(SEAL)

CONTRACTOR: SAINT LOUIS UNIVERSITY

APPENDIX A

For the Contract period July 1, 1980 through June 30, 1981

Article A-I RESEARCH TO BE PERFORMED BY CONTRACTOR

(a) The unclassified scope of work under this contract in accordance with Contractor's proposal entitled, "A Seismological Study of the Northern Extent of the New Madrid Seismic Zone" is as follows:

1. Maintain and operate two short-period seismographic subarray in the New Madrid Earthquakes Study area -- one subarray in the Wabash Valley (7-8 stations) and the other in the vicinity of New Madrid, Missouri (7-8 stations).
2. Publish all phases, locations, magnitudes, and focal mechanisms (when available) in Central Mississippi Valley Earthquake Bulletin.
3. Correlate resulting seismicity with local and regional geology.
4. Determine the current hypocenters and relocate significant historic events using the joint hypocenter technique.
5. Conduct velocity and attenuation analyses of the recorded data using the U. S. Geological Survey seismic array processing system to the maximum possible extent.
6. A simple map (page size) of current seismicity shall be included in the quarterly technical reports.

(b) The Principal Investigator expects to devote the following approximate amount(s) of time to the contract work:

Robert B. Hermann: 100% of his time for 1 academic month and
100% of his time for 1 summer month

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 | \$ <u>57,000.00</u> |
| (2) Equipment to be purchased or fabricated by the Contractor | \$ <u>-0-</u> |

- (3) Travel
- | | |
|--------------|-------------|
| (i) Domestic | \$ 5,370.00 |
| (ii) Foreign | \$ -0- |
- (4) Other direct costs including fringe benefits
- (5) Indirect costs based on a predetermined rate of 46 percent applicable to total direct costs less individual items of equipment in excess of \$500.00, subcontracts and subgrants in excess of \$2,500.00, alterations and renovations and stipends.

(b) Items, if any, significant to the performance of this contract, but excluded from computation of Support Cost and from consideration in proportioning costs:

NONE

(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:

NONE

Article A-III

The total estimated cost of items under A-II(a) above for the contract period stated in this Appendix A is \$112,000.00 ; 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 \$ 112,000.00 .

The estimated NRC Support Cost is funded as follows:

- | | |
|---|---------------|
| (a) Estimated unexpended balance from prior period(s) | \$ -0- |
| (b) New funds for the current period | \$ 112,000.00 |
- (c) The new funds being added in A-III(b) constitute the basis for advance payments provided under Article B-X.