Modification No. 2

SUPPLEMENTAL AGREEMENT
BETWEEN

MEMPHIS STATE UNIVERSITY

AND

THE U. S. NUCLEAR REGULATORY COMMISSION

THIS SUPPLEMENTAL AGREEMENT, effective the 1st day of December, 1979, 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 MEMPHIS STATE UNIVERSITY

(hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

WHEREAS, the parties desire to modify Contract No. NRC-04-78-200 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 "November 30, 1980" is substituted for the date "November 30, 1979".

3. In Article III - Consideration, the sum "$187,298.00" is substituted for the sum "$121,526.00".

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UNITED STATES OF AMERICA

BY: [signature]
Kellogg V. Morton, Chief
Research Contracts Branch
(title)

Nuclear Regulatory Commission

MEMPHIS STATE UNIVERSITY

BY: [signature]
Billy M. Jones, President
(title)

I, Norman S. Trenk (attester), certify that I am the

Director, Office of Sponsored Programs (title) of the Contractor named

under this document: that Billy M. Jones (signatory)

who signed this document on behalf of said Contractor was then

President 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.

[signature]

(SEAL)

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CONTRACTOR: MEMPHIS STATE UNIVERSITY

APPENDIX A

For the Contract period December 1, 1979 through November 30, 1980

Article A-I RESEARCH TO BE PERFORMED BY CONTRACTOR

(a) The unclassified scope of work under this contract entitled, "Memphis Area Regional Seismic Network" is as follows: Operation of the Memphis Area Regional Seismic Network will be continued and the data quality upgraded to provide a base for determining the southern extent of the New Madrid Seismic Zone. Additional stations will be installed in areas of particular interest. A portable telemetry net will be used to study swarms and aftershock sequences.

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

James E. Zollweg: 10% of his time for 12 months

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 $ 10,792.00

(2) Equipment to be purchased or fabricated by the Contractor $ 32,970.00

Items Over $1,000.00:

7 Geotech S13 seismometers	$8,050.00
2 4-track stereo tape recorders	3,000.00
1 4-track stereo tape playback	1,500.00
1 DATUM 9100 Digital Clock	2,500.00
1 8 channel MFE strip chart recorder with DP100 interface	7,800.00
16 discriminators (for magnetic tape system)	4,800.00
- Krohn-Hite variable high & low cut filters	1,400.00
10 antennae	1,500.00

Items Under $1,000.00:

7 amp/VCO's	$875.00
7 instrument enclosures	945.00
2 discriminators (for new stations)	600.00

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(3) Travel
(i) Domestic $ 2,945.00

(ii) Foreign $ -0-

(4) Other direct costs including fringe benefits

(5) Indirect costs based on a predetermined rate of 65 percent applicable to salaries and wages.

(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 $65,772.00 ; 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 $ 65,772.00 .

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 $ 65,772.00

(c) The new funds being added in A-III(b) constitute the basis for advance payments provided under Article B-X.

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