

SUPPLEMENTAL AGREEMENT  
BETWEEN  
THE TRUSTEES OF BOSTON COLLEGE  
AND  
THE U. S. NUCLEAR REGULATORY COMMISSION

THIS SUPPLEMENTAL AGREEMENT, effective the 1st day of July, 1982, 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 THE TRUSTEES OF BOSTON COLLEGE (hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

WHEREAS, the parties desire to modify Contract No. NRC-04-76-291 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, supersedes Modification No. 8 of this contract in its entirety, and 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 "July 31, 1983" is substituted for the date "June 30, 1983".
3. In Article III - Consideration, the sum "\$1,836,390.00" is substituted for the sum "\$1,786,390.00".

IN WITNESS WHEREOF, the parties have executed this document.

UNITED STATES OF AMERICA

BY: Raymond P. Gustave  
Raymond P. Gustave  
Contracting Officer  
(title)

Nuclear Regulatory Commission

TRUSTEES OF BOSTON COLLEGE

BY: John R. Smith  
Mr. John R. Smith, Financial  
Vice President & Treasurer

I, Leo J. McGovern, S.J., certify that I am the  
(attester)  
Secretary of the University of the Contractor named  
(title)

under this document; that John R. Smith  
(signatory)

who signed this document on behalf of said Contractor was then  
Financial Vice President & Treasurer 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)

Leo J. McGovern, S.J.

CONTRACTOR: TRUSTEES OF BOSTON COLLEGE

APPENDIX A

For the Contract period July 1, 1982 through July 30, 1983

Article A-I RESEARCH TO BE PERFORMED BY CONTRACTOR

- (a) The unclassified scope of work under this contract entitled, "A Seismotectonic Study of New England and Adjacent Areas" is as follows:

The study would undertake a comprehensive analysis of the geology and seismicity of the region and their relations. This would bring together in a single report all of the pertinent data on the geology and seismicity of the region and include a new geologic map along with discussion of the tectonic setting, causes of seismicity and possible zonation, among others. This would be based upon both existing and new data.

In the discussion below the Moodus area refers to the area immediately adjacent to Moodus (fig. 2) whereas the south-central Connecticut region or the region refers to that covered by the 12 quadrangles shown on figure 2, including the Moodus area.

The study will analyze, summarize, and integrate the results of the project work completed and in progress in the region. These studies are:

- 1) Geologic map and description of south-central Connecticut (data prior to 1976).

- 2) Gravity study of south-central Connecticut.
- 3) Aeromagnetic study of south-central Connecticut.
- 4) Detailed geology of the Moodus area.

A new geologic map of the region will be produced by combining this new information and that obtained during the past six years of the study with the previous available work. A structural analysis of the new gravity data and offshore magnetic data will also be integrated into the map.

The comprehensive report will include a set of regional maps of south-central Connecticut, at a scale of 1:62,500, showing:

- 1) Compilation of geologic data prior to 1976
- 2) Gravity data
- 3) Aeromagnetic data
- 4) Lineament data
- 5) Structural features
- 6) Earthquake epicenters
- 7) Geologic data to 1983

A set of maps of the central part of the Moodus area at 1:12,000 scale will show:

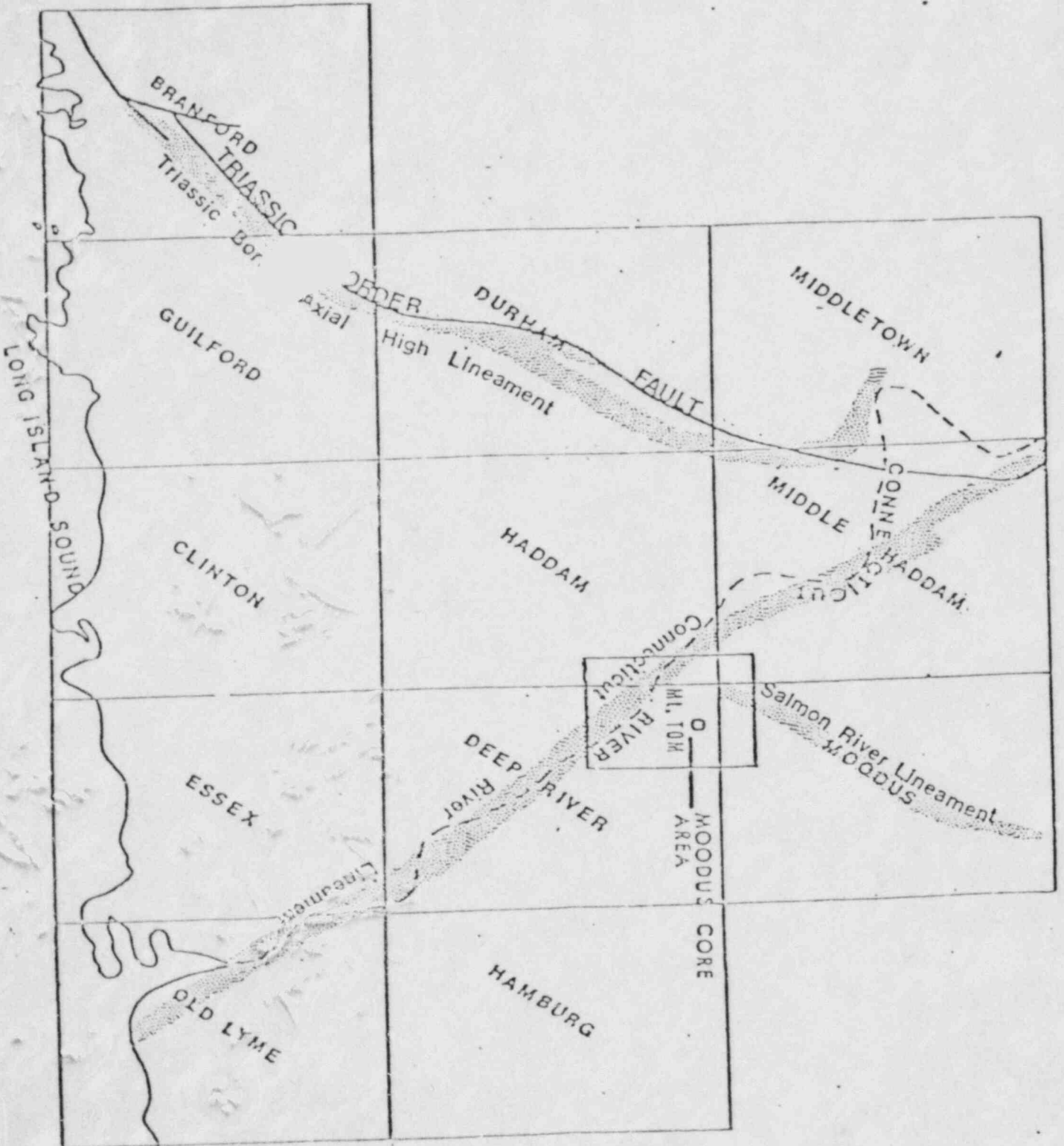
- 1) Detailed Geologic data
- 2) Gravity data
- 3) Aeromagnetic data

Also a set of maps of the Salmon River at a scale of 1:12,000 scale will show:

- 1) Detailed geologic data
- 2) Lineament data
- 3) Earthquake epicenters of the 1980 and 1981 swarms



Figure 1. Index map of the Moodus area, south-central Connecticut, showing 15-minute quadrangles and gravity lineaments.



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

Patrick J. Barosh - 100% of his time for 3 months

ARTICLE A-11 WAYS AND MEANS OF PERFORMANCE

- (a) Items for which support will be provided as indicated in A-111, below

|   |              |
|---|--------------|
| (1) Salaries and Wages  | \$ 25,100.00 |
| (2) Equipment to be purchased or fabricated by the Contractor | \$ -0-       |
| (3) Travel  |              |
| (i) Domestic  | \$ 3,400.00  |
| (ii) Foreign  | \$ -0-       |

- (4) Other direct costs including fringe benefits

(5) Indirect costs based on a predetermined rate of 47 percent applicable to Modified Total Direct Costs (MTDC) which equals total direct costs less permanent equipment, subcontracts and subgrants in excess of \$25,000.00, computer charges, fee remission, tuition and fees, and external conferences.

- (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 \$50,000.00; 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 \$50,000.00.

The estimated NRC Support Cost is funded as follows:

- |   |                     |
|---|---------------------|
| (a) Estimated unexpended balance from prior period(s)   | \$ <u>-0-</u>       |
| (b) New funds for the current period  | \$ <u>50,000.00</u> |
| (c) The new funds being added in A-III(b) constitute the basis for advance payments provided under Article B-X. |                     |