

1. AMENDMENT/MODIFICATION NO. 12	2. EFFECTIVE DATE 9/15/80	3. REQUISITION/PURCHASE REQUEST NO. RES-78-262 dated 6/11/80	4. PROJECT NO. (If applicable)
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5. ISSUED BY U. S. Nuclear Regulatory Commission Division of Contracts Washington, DC 20555	6. ADMINISTERED BY (If other than block 5)
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7. CONTRACTOR NAME AND ADDRESS (Street, city, county, state, and ZIP Code) State of Alabama Geological Survey of Alabama State Oil and Gas Board P. O. Drawer 0 University, AL 35486	FACILITY CODE
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8. AMENDMENT OF SOLICITATION NO. DATED _____ (See block 9)
<input checked="" type="checkbox"/> MODIFICATION OF CONTRACT/ORDER NO. NRC-04-78-262 DATED 9/15/78 (See block 11)

9. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in block 12. The hour and date specified for receipt of Offers is extended, is not extended.

Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended, by one of the following methods:

(a) By signing and returning _____ copies of this amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If, by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

10. ACCOUNTING AND APPROPRIATION DATA (If required) B&R NO. 60-19-12-01	FIN NO. B6617	\$15,961.00
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11. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS

(a) This Change Order is issued pursuant to _____
The Changes set forth in block 12 are made to the above numbered contract/order.

(b) The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, appropriation data, etc.) set forth in block 12.

(c) This Supplemental Agreement is entered into pursuant to authority of 41 U.S.C. 252(c)(10)
It modifies the above numbered contract as set forth in block 12.

12. DESCRIPTION OF AMENDMENT/MODIFICATION

A. To ARTICLE II - STATEMENT OF WORK, the following additional work is added:

During the third year of this research program, the Contractor shall perform the additional work described in the Geological Survey of Alabama (GSA) Research Proposal entitled, "General Geology, Geophysics, and Seismicity of northwest Alabama" which is incorporated by reference and made a part hereof. Specifically, GSA will perform the following tasks:

1. Continue mapping faulting in northwestern Alabama with concentration placed on determining dates of movements.

POOR ORIGINAL

Except as provided herein, all terms and conditions of the document referenced in block 8, as heretofore changed, remain unchanged and in full force and effect.

13. <input type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT		<input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 4 COPIES TO ISSUING OFFICE	
14. NAME OF CONTRACTOR/OFFEROR BY <u>Thomas J. Joiner</u> (Signature of person authorized to sign)		17. UNITED STATES OF AMERICA BY <u>Kellogg V. Morton</u> (Signature of Contracting Officer)	
15. NAME AND TITLE OF SIGNER (Type or print) Thomas J. Joiner State Geologist	16. DATE SIGNED 8/22/80	18. NAME OF CONTRACTING OFFICER (Type or print) Kellogg V. Morton	19. DATE SIGNED 9/5/80

2. Initiate new field studies along the Tombigee Waterway excavation while it is open and available for studying, Dr. Ernest Russell, Mississippi State University, will assist in this endeavor.
3. Complete a final report on the "General Geology, Geophysics, and Seismicity of Northwest Alabama". This information will be a part of the coordinated New Madrid Seismotectonic Study.
4. Prepare a detailed age-of-faulting map for northwest Alabama based on information acquired from new soil and rock exposures.

- B. Delete Article III - PERIOD OF PERFORMANCE in its entirety and substitute the following new Article in lieu thereof:

"ARTICLE III - PERIOD OF PERFORMANCE

The period of performance of the work described in ARTICLE II - STATEMENT OF WORK shall commence on September 15, 1978 and shall continue up to and including completion thereof, estimated to occur on or about September 14, 1981; provided, however, that said period of performance may be extended for additional periods by written agreement of the parties."

- C. Delete ARTICLE IV - TOTAL ESTIMATED COST AND OBLIGATION OF FUNDS in its entirety and substitute the following new Article in lieu thereof:

"ARTICLE IV - TOTAL ESTIMATED COST AND OBLIGATION OF FUNDS

1. Total Estimated Cost. The total estimated cost of the work to be performed under this contract is \$71,279.50. Of said amount, the total estimated cost to the Commission is \$45,269.51 and to the State of Alabama Geological Survey \$26,009.99.
2. Obligation of Funds. The amount presently obligated by the Commission with respect to this contract is \$45,269.51. Such amount may be increased unilaterally by the Commission by written notice to the Contractor and may be increased or decreased by written agreement of the parties (whether or not by formal modification of this contract)."